

**INDICATIONS RELATING TO A DEPOSITED MICROORGANISM
OR OTHER BIOLOGICAL MATERIAL**

(PCT Rule 13bis)

A. The indications made below relate to the deposited microorganism or other biological material referred to in the description on page 20, paragraph 58.

B. IDENTIFICATION OF DEPOSIT

Further deposits are identified on an additional sheet ☒

Name of depositary institution: American Type Culture Collection

Address of depositary institution *(including postal code and country)*

10801 University Boulevard
Manassas, Virginia 20110-2209
United States of America

Date of deposit

22 October 1996

Accession Number

97768

C. ADDITIONAL INDICATIONS *(leave blank if not applicable)*

This information is continued on an additional sheet ☐

D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE *(if the indications are not for all designated States)*

Europe

In respect of those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which the application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28(4) EPC).

Continued on additional sheets

E. SEPARATE FURNISHING OF INDICATIONS *(leave blank if not applicable)*

The indications listed below will be submitted to the international Bureau later *(specify the general nature of the indications e.g., "Accession Number of Deposit")*

	For receiving Office use only			For International Bureau use only	
<input type="checkbox"/> This sheet was received with the international application			<input type="checkbox"/> This sheet was received by the International Bureau on:		
Authorized officer			Authorized officer		

ATCC Deposit No.: 97768

CANADA

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

AUSTRALIA

The applicant hereby gives notice that the furnishing of a sample of a microorganism shall only be effected prior to the grant of a patent, or prior to the lapsing, refusal or withdrawal of the application, to a person who is a skilled addressee without an interest in the invention (Regulation 3.25(3) of the Australian Patents Regulations).

FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

ATCC Deposit No.: 97768

DENMARK

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

**INDICATIONS RELATING TO A DEPOSITED MICROORGANISM
OR OTHER BIOLOGICAL MATERIAL**

(PCT Rule 13bis)

A. The indications made below relate to the deposited microorganism or other biological material referred to in the description on page 20, paragraph 59.

B. IDENTIFICATION OF DEPOSIT

Further deposits are identified on an additional sheet ☒

Name of depositary institution: American Type Culture Collection

Address of depositary institution *(including postal code and country)*

10801 University Boulevard
Manassas, Virginia 20110-2209
United States of America

Date of deposit

10 December 1998

Accession Number

203518

C. ADDITIONAL INDICATIONS *(leave blank if not applicable)*

This information is continued on an additional sheet ☐

D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE *(if the indications are not for all designated States)*

Europe

In respect of those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which the application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28(4) EPC).

Continued on additional sheets

E. SEPARATE FURNISHING OF INDICATIONS *(leave blank if not applicable)*

The indications listed below will be submitted to the international Bureau later *(specify the general nature of the indications e.g., "Accession Number of Deposit")*

	For receiving Office use only			For International Bureau use only	
<input type="checkbox"/> This sheet was received with the international application			<input type="checkbox"/> This sheet was received by the International Bureau on:		
Authorized officer			Authorized officer		

ATCC Deposit No.: 203518

CANADA

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

AUSTRALIA

The applicant hereby gives notice that the furnishing of a sample of a microorganism shall only be effected prior to the grant of a patent, or prior to the lapsing, refusal or withdrawal of the application, to a person who is a skilled addressee without an interest in the invention (Regulation 3.25(3) of the Australian Patents Regulations).

FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

ATCC Deposit No.: 203518

DENMARK

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

**INDICATIONS RELATING TO A DEPOSITED MICROORGANISM
OR OTHER BIOLOGICAL MATERIAL**

(PCT Rule 13bis)

A. The indications made below relate to the deposited microorganism or other biological material referred to in the description on page 145, Table 2.

B. IDENTIFICATION OF DEPOSIT

Further deposits are identified on an additional sheet ☒

Name of depositary institution: American Type Culture Collection

Address of depositary institution *(including postal code and country)*

10801 University Boulevard
Manassas, Virginia 20110-2209
United States of America

Date of deposit

27 March 2001

Accession Number

PTA-3238

C. ADDITIONAL INDICATIONS *(leave blank if not applicable)*

This information is continued on an additional sheet ☐

D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE *(if the indications are not for all designated States)*

Europe

In respect of those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which the application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28(4) EPC).

Continued on additional sheets

E. SEPARATE FURNISHING OF INDICATIONS *(leave blank if not applicable)*

The indications listed below will be submitted to the international Bureau later *(specify the general nature of the indications e.g., "Accession Number of Deposit")*

	For receiving Office use only			For International Bureau use only	
<input type="checkbox"/> This sheet was received with the international application			<input type="checkbox"/> This sheet was received by the International Bureau on:		
Authorized officer			Authorized officer		

ATCC Deposit No.: PTA-3238**CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

AUSTRALIA

The applicant hereby gives notice that the furnishing of a sample of a microorganism shall only be effected prior to the grant of a patent, or prior to the lapsing, refusal or withdrawal of the application, to a person who is a skilled addressee without an interest in the invention (Regulation 3.25(3) of the Australian Patents Regulations).

FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

ATCC Deposit No.: PTA-3238

DENMARK

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

**INDICATIONS RELATING TO A DEPOSITED MICROORGANISM
OR OTHER BIOLOGICAL MATERIAL**

(PCT Rule 13bis)

A. The indications made below relate to the deposited microorganism or other biological material referred to in the description on page 145, Table 2.

B. IDENTIFICATION OF DEPOSIT

Further deposits are identified on an additional sheet ☒

Name of depositary institution: American Type Culture Collection

Address of depositary institution *(including postal code and country)*

10801 University Boulevard
Manassas, Virginia 20110-2209
United States of America

Date of deposit

27 March 2001

Accession Number

PTA-3239

C. ADDITIONAL INDICATIONS *(leave blank if not applicable)*

This information is continued on an additional sheet ☐

D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE *(if the indications are not for all designated States)*

Europe

In respect of those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which the application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28(4) EPC).

Continued on additional sheets

E. SEPARATE FURNISHING OF INDICATIONS *(leave blank if not applicable)*

The indications listed below will be submitted to the international Bureau later *(specify the general nature of the indications e.g., "Accession Number of Deposit")*

	For receiving Office use only			For International Bureau use only	
<input type="checkbox"/> This sheet was received with the international application			<input type="checkbox"/> This sheet was received by the International Bureau on:		
Authorized officer			Authorized officer		

ATCC Deposit No.: PTA-3239**CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

AUSTRALIA

The applicant hereby gives notice that the furnishing of a sample of a microorganism shall only be effected prior to the grant of a patent, or prior to the lapsing, refusal or withdrawal of the application, to a person who is a skilled addressee without an interest in the invention (Regulation 3.25(3) of the Australian Patents Regulations).

FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

ATCC Deposit No.: PTA-3239

DENMARK

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

**INDICATIONS RELATING TO A DEPOSITED MICROORGANISM
OR OTHER BIOLOGICAL MATERIAL**

(PCT Rule 13bis)

A. The indications made below relate to the deposited microorganism or other biological material referred to in the description on page 145, Table 2.

B. IDENTIFICATION OF DEPOSIT

Further deposits are identified on an additional sheet ☒

Name of depositary institution: American Type Culture Collection

Address of depositary institution *(including postal code and country)*

10801 University Boulevard
Manassas, Virginia 20110-2209
United States of America

Date of deposit

27 March 2001

Accession Number

PTA-3240

C. ADDITIONAL INDICATIONS *(leave blank if not applicable)*

This information is continued on an additional sheet ☐

D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE *(if the indications are not for all designated States)*

Europe

In respect of those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which the application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28(4) EPC).

Continued on additional sheets

E. SEPARATE FURNISHING OF INDICATIONS *(leave blank if not applicable)*

The indications listed below will be submitted to the international Bureau later *(specify the general nature of the indications e.g., "Accession Number of Deposit")*

	For receiving Office use only			For International Bureau use only	
<input type="checkbox"/> This sheet was received with the international application			<input type="checkbox"/> This sheet was received by the International Bureau on:		
Authorized officer			Authorized officer		

ATCC Deposit No.: PTA-3240**CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

AUSTRALIA

The applicant hereby gives notice that the furnishing of a sample of a microorganism shall only be effected prior to the grant of a patent, or prior to the lapsing, refusal or withdrawal of the application, to a person who is a skilled addressee without an interest in the invention (Regulation 3.25(3) of the Australian Patents Regulations).

FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

ATCC Deposit No.: PTA-3240

DENMARK

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

**INDICATIONS RELATING TO A DEPOSITED MICROORGANISM
OR OTHER BIOLOGICAL MATERIAL**

(PCT Rule 13*bis*)

A. The indications made below relate to the deposited microorganism or other biological material referred to in the description on page 145, Table 2.

B. IDENTIFICATION OF DEPOSIT

Further deposits are identified on an additional sheet ☒

Name of depositary institution: American Type Culture Collection

Address of depositary institution (*including postal code and country*)

10801 University Boulevard
Manassas, Virginia 20110-2209
United States of America

Date of deposit

27 March 2001

Accession Number

PTA-3241

C. ADDITIONAL INDICATIONS (*leave blank if not applicable*)

This information is continued on an additional sheet ☐

D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (*if the indications are not for all designated States*)

Europe

In respect of those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which the application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28(4) EPC).

Continued on additional sheets

E. SEPARATE FURNISHING OF INDICATIONS (*leave blank if not applicable*)

The indications listed below will be submitted to the international Bureau later (*specify the general nature of the indications e.g., "Accession Number of Deposit"*)

	For receiving Office use only			For International Bureau use only	
<input type="checkbox"/> This sheet was received with the international application			<input type="checkbox"/> This sheet was received by the International Bureau on:		
Authorized officer			Authorized officer		

ATCC Deposit No.: PTA-3241

CANADA

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

AUSTRALIA

The applicant hereby gives notice that the furnishing of a sample of a microorganism shall only be effected prior to the grant of a patent, or prior to the lapsing, refusal or withdrawal of the application, to a person who is a skilled addressee without an interest in the invention (Regulation 3.25(3) of the Australian Patents Regulations).

FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

ATCC Deposit No.: PTA-3241

DENMARK

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

**INDICATIONS RELATING TO A DEPOSITED MICROORGANISM
OR OTHER BIOLOGICAL MATERIAL**

(PCT Rule 13bis)

A. The indications made below relate to the deposited microorganism or other biological material referred to in the description on page 145, Table 2.

B. IDENTIFICATION OF DEPOSIT

Further deposits are identified on an additional sheet ☒

Name of depositary institution: American Type Culture Collection

Address of depositary institution *(including postal code and country)*

10801 University Boulevard
Manassas, Virginia 20110-2209
United States of America

Date of deposit

27 March 2001

Accession Number

PTA-3242

C. ADDITIONAL INDICATIONS *(leave blank if not applicable)*

This information is continued on an additional sheet ☐

D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE *(if the indications are not for all designated States)*

Europe

In respect of those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which the application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28(4) EPC).

Continued on additional sheets

E. SEPARATE FURNISHING OF INDICATIONS *(leave blank if not applicable)*

The indications listed below will be submitted to the international Bureau later *(specify the general nature of the indications e.g., "Accession Number of Deposit")*

	For receiving Office use only			For International Bureau use only	
<input type="checkbox"/> This sheet was received with the international application			<input type="checkbox"/> This sheet was received by the International Bureau on:		
Authorized officer			Authorized officer		

ATCC Deposit No.: PTA-3242

CANADA

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

AUSTRALIA

The applicant hereby gives notice that the furnishing of a sample of a microorganism shall only be effected prior to the grant of a patent, or prior to the lapsing, refusal or withdrawal of the application, to a person who is a skilled addressee without an interest in the invention (Regulation 3.25(3) of the Australian Patents Regulations).

FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

ATCC Deposit No.: PTA-3242

DENMARK

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

**INDICATIONS RELATING TO A DEPOSITED MICROORGANISM
OR OTHER BIOLOGICAL MATERIAL**

(PCT Rule 13bis)

A. The indications made below relate to the deposited microorganism or other biological material referred to in the description on page 145, Table 2.

B. IDENTIFICATION OF DEPOSIT

Further deposits are identified on an additional sheet ☒

Name of depositary institution: American Type Culture Collection

Address of depositary institution *(including postal code and country)*

10801 University Boulevard
Manassas, Virginia 20110-2209
United States of America

Date of deposit

27 March 2001

Accession Number

PTA-3243

C. ADDITIONAL INDICATIONS *(leave blank if not applicable)*

This information is continued on an additional sheet ☐

D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE *(if the indications are not for all designated States)*

Europe

In respect of those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which the application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28(4) EPC).

Continued on additional sheets

E. SEPARATE FURNISHING OF INDICATIONS *(leave blank if not applicable)*

The indications listed below will be submitted to the international Bureau later *(specify the general nature of the indications e.g., "Accession Number of Deposit")*

	For receiving Office use only			For International Bureau use only	
<input type="checkbox"/> This sheet was received with the international application			<input type="checkbox"/> This sheet was received by the International Bureau on:		
Authorized officer			Authorized officer		

ATCC Deposit No.: PTA-3243**CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

AUSTRALIA

The applicant hereby gives notice that the furnishing of a sample of a microorganism shall only be effected prior to the grant of a patent, or prior to the lapsing, refusal or withdrawal of the application, to a person who is a skilled addressee without an interest in the invention (Regulation 3.25(3) of the Australian Patents Regulations).

FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

ATCC Deposit No.: PTA-3243

DENMARK

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

WHAT IS CLAIMED IS:

1. An antibody that immunospecifically binds to BLyS comprising a first amino acid sequence at least 95% identical to an second amino acid sequence selected from the group consisting of:

(a) an amino acid sequence comprising the amino acid sequence of a VHCDR of any one of the scFvs of SEQ ID NOS:1 through 2128; and

(b) an amino acid sequence comprising the amino acid sequence of a VLCDR of any one of the scFvs of SEQ ID NOS:1 through 2128.

2. The antibody of claim 1, wherein the second amino acid sequence consists of the amino acid sequence of a VHCDR3 of any one of the scFvs of SEQ ID NOS:2129 through 3227.

3. The antibody of claim 1, wherein the second amino acid sequence consists of the amino acid sequence of a VH domain of any one of the scFvs of SEQ ID NOS:1 through 2128.

4. The antibody of claim 3 in which said VH domain consists of the amino acid sequence of the VH domain of any one of the scFvs of SEQ ID NOS: 1 through 1562.

5. The antibody of claim 4 in which said antibody immunospecifically binds to both the soluble form and membrane-bound form of BLyS.

6. The antibody of claim 4 in which said VH domain consists of the amino acid sequence of the VH domain of any one of the scFvs of SEQ ID NOS: 1 through 46 and 321 through 329.

7. The antibody of claim 6 in which said VH domain consists of the amino acid sequence of the VH domain of any one of the scFvs of SEQ ID NOS: 2, 9, and 327.

8. The antibody of claim 4 in which said VH domain consists of the amino acid sequence of the VH domain of any one of the scFvs of SEQ ID NOS: 834 through 872.

9. The antibody of claim 3 in which said VH domain consists of the amino acid sequence of the VH domain of any one of the scFvs of SEQ ID NOS: 1563 through 1880.

10. The antibody of claim 9 in which, and in which said antibody immunospecifically binds to the soluble form of BLYS.

11. The antibody of claim 9 in which said VH domain consists of the amino acid sequence of the VH domain of any one of the scFvs of SEQ ID NOS: 1563 through 1569.

12. The antibody of claim 9 in which said VH domain consists of the amino acid sequence of the VH domain of any one of the scFvs of SEQ ID NOS: 1570 through 1595.

13. The antibody of claim 3 in which said VH domain consists of the amino acid sequence of the VH domain of any one of the scFvs of SEQ ID NOS: 1881 through 2128.

14. The antibody of claim 13 in which said antibody immunospecifically binds to the membrane-bound form of BLYS.

15. The antibody of claim 13 in which said VH domain consists of the amino acid sequence of the VH domain of any one of the scFvs of SEQ ID NOS: 1881 through 1885.

16. The antibody of claim 13 in which said VH domain consists of the amino acid sequence of the VH domain of any one of the scFvs of SEQ ID NOS: 1886 through 1908.

17. The antibody of claim 1, wherein the second amino acid sequence consists of the amino acid sequence of a VL domain of any one of the scFvs of SEQ ID NOS:1 through 2128.

18. The antibody of claim 17 in which said VL domain consists of the amino acid sequence of the VL domain of any one of the scFvs of SEQ ID NOS: 1 through 1562.

19. The antibody of claim 18 in which said antibody immunospecifically binds to both the soluble form and membrane-bound form of BLYS.

20. The antibody of claim 18 in which said VL domain consists of the amino acid sequence of the VL domain of any one of the scFvs of SEQ ID NOS: 1 through 46 and 321 through 329.

21. The antibody of claim 20 in which said VL domain consists of the amino acid sequence of the VH domain of any one of the scFvs of SEQ ID NOS: 2, 9, and 327.

22. The antibody of claim 18 in which said VL domain consists of the amino acid sequence of the VL domain of any one of the scFvs of SEQ ID NOS: 834 through 872.

23. The antibody of claim 17 in which said VL domain consists of the amino acid sequence of the VL domain of any one of the scFvs of SEQ ID NOS: 1563 through 1880.

24. The antibody of claim 23 said antibody immunospecifically binds to the soluble form of BLYS.

25. The antibody of claim 23 in which said VL domain consists of the amino acid sequence of the VL domain of any one of the scFvs of SEQ ID NOS: 1563 through 1569.

26. The antibody of claim 23 in which said VL domain consists of the amino acid sequence of the VL domain of any one of the scFvs of SEQ ID NOS: 1570 through 1595.

27. The antibody of claim 17 in which said VL domain consists of the amino acid sequence of the VL domain of any one of the scFvs of SEQ ID NOS: 1881 through 2128.

28. The antibody of claim 27 in which said antibody immunospecifically binds to the membrane-bound form of BlyS.

29. The antibody of claim 27 in which said VL domain consists of the amino acid sequence of the VL domain of any one of the scFvs of SEQ ID NOS: 1881 through 1885.

30. The antibody of claim 27 in which said VL domain consists of the amino acid sequence of the VL domain of any one of the scFvs of SEQ ID NOS: 1886 through 1908.

31. The antibody of claim 3, which also comprises an amino acid sequence at least 95% identical to the amino acid sequence of a VL domain of any one of the scFvs of SEQ ID NOS:1 through 2128.

32. The antibody of claim 31, wherein the VH and VL domains are from the same scFv.

33. The antibody of claim 32, wherein the scFv is the scFv of SEQ ID NO:2.

34. The antibody of claim 32, wherein the scFv is the scFv of SEQ ID NO:9.

35. The antibody of claim 32, wherein the scFv is the scFv of SEQ ID NO:327.

36. The antibody of claim 1 wherein the first amino acid sequence is identical to the second amino acid sequence.

37. The antibody of claim 36 wherein the second amino acid sequence consists of the amino acid sequence of a VH domain of any one of the scFvs of SEQ ID NOS:1 through 2128.

38. The antibody of claim 36 wherein the second amino acid sequence consists of the amino acid sequence of a VL domain of any one of the scFvs of SEQ ID NOS:1 through 2128.

39. The antibody of claim 37 which also comprises an amino acid sequence 100% identical to the amino acid sequence of a VL domain of any one of the scFvs of SEQ ID NOS:1 through 2128.

40. The antibody of claim 39, wherein the scFv is the scFv of SEQ ID NO:2.

41. The antibody of claim 39, wherein the scFv is the scFv of SEQ ID NO:9.

42. The antibody of claim 39, wherein the scFv is the scFv of SEQ ID NO:327.

43. The antibody of claim 1 through wherein the BLyS is a BLyS homotrimer.

44. The antibody of claim 43, wherein the individual protein components of the BLyS homotrimer consist of the mature form of BLyS.

45. The antibody of any one of claims 1 through 44, wherein the BLyS is a BLyS heterotrimer.

46. The antibody of claim 45, wherein the BLyS heterotrimer comprises at least one BLyS polypeptide and at least one APRIL polypeptide.

47. The antibody of claim 46, wherein the BLyS polypeptide consists of the mature form of BLyS and the APRIL polypeptide consists of the mature form of APRIL.

48. The antibody of any one of claims 1 through 47, wherein the antibody is selected from the group consisting of:

- (a) a whole immunoglobulin molecule;
- (b) an scFv;
- (c) a monoclonal antibody;
- (d) a human antibody;
- (e) a chimeric antibody;
- (f) a humanized antibody;
- (g) a Fab fragment;
- (h) an Fab' fragment;
- (i) an F(ab')₂;
- (j) an Fv; and
- (k) a disulfide linked Fv.

49. The antibody of claim 3 or 37, which also comprises a heavy chain immunoglobulin constant domain selected from the group consisting of:

- (a) a human IgM constant domain;
- (b) a human IgG1 constant domain;
- (c) a human IgG2 constant domain;
- (d) a human IgG3 constant domain;
- (e) a human IgG4 constant domain; and
- (f) a human IgA constant domain.

50. The antibody of claim 17 or 38, which also comprises a light chain immunoglobulin constant domain selected from the group consisting of:

- (a) a human Ig kappa constant domain;
- (b) a human Ig lambda constant domain.

51. The antibody of any one of claims 1 through 50, wherein the antibody has a dissociation constant (K_D) selected from the group consisting of:

- (a) a dissociation constant (K_D) between 10^{-7} M and 10^{-8} M;
- (b) a dissociation constant (K_D) between 10^{-8} M and 10^{-9} M;
- (c) a dissociation constant (K_D) between 10^{-9} M and 10^{-10} M;
- (d) a dissociation constant (K_D) between 10^{-10} M and 10^{-11} M;
- (e) a dissociation constant (K_D) between 10^{-11} M and 10^{-12} M; and
- (f) a dissociation constant (K_D) between 10^{-12} M and 10^{-13} M.

52. The antibody of any one of claims 1 through 51, wherein the antibody is conjugated to a detectable label.

53. The antibody of claim 52, wherein the detectable label is a radiolabel.

54. The antibody of claim 53, wherein the radiolabel is ^{125}I , ^{131}I , ^{111}In , ^{90}Y , ^{99}Tc , ^{177}Lu , ^{166}Ho , or ^{153}Sm .

55. The antibody of claim 52, wherein the detectable label is an enzyme, a fluorescent label, a luminescent label, or a bioluminescent label.

56. The antibody of any one of claims 1 through 51, wherein the antibody is biotinylated.

57. The antibody of any one of claims 1 through 51, wherein the antibody is conjugated to a therapeutic or cytotoxic agent.

58. The antibody of claim 57, wherein the therapeutic or cytotoxic agent is selected from the group consisting of:

- (a) an anti-metabolite,
- (b) an alkylating agent;
- (c) an antibiotic;
- (d) a growth factor;
- (e) a cytokine;
- (f) an anti-angiogenic agent;
- (g) an anti-mitotic agent;
- (h) an anthracycline;
- (i) toxin; and
- (j) an apoptotic agent.

59. An antibody of any one of claims 1 through 58, that neutralizes BLyS or a fragment thereof.

60. The antibody of claim 59, that diminishes or abolishes the ability of BLyS or a fragment thereof to bind to its receptor.

61. The antibody of claim 60, wherein the receptor is TACI.

62. The antibody of claim 60, wherein the receptor is BCMA.

63. The antibody of claim 59, that diminishes or abolishes the ability of BLyS or a fragment thereof to stimulate B cell proliferation.

64. The antibody of claim 59, that diminishes or abolishes the ability of BLyS or a fragment thereof to stimulate immunoglobulin secretion by B cells.

65. An antibody of any one of claims 1 through 58, that enhances the activity of BLyS or a fragment thereof.

66. The antibody of claim 65, that increases the ability of BLyS or a fragment thereof to bind to its receptor.

67. The antibody of claim 66, wherein the receptor is TACI.

68. The antibody of claim 66, wherein the receptor is BCMA.

69. The antibody of claim 65, that increases the ability of BLyS or a fragment thereof to stimulate B cell proliferation.

70. The antibody of claim 65, that increases the ability of BLyS or a fragment thereof to stimulate immunoglobulin secretion by B cells.

71. The antibody of any one of claims 1 through 70 covalently linked to a heterologous polypeptide.

72. The antibody of claim 71, wherein the heterologous polypeptide is human serum albumin.

73. The antibody of any one of claims 1 through 72 in a pharmaceutically acceptable carrier.

74. A kit comprising the antibody of any one of claims 1 through 73.

75. An isolated nucleic acid molecule encoding the antibody of any one of claims 1 through 74.

76. A vector comprising the isolated nucleic acid molecule of claim 75.

77. The vector of claim 76 which also comprises a nucleotide sequence which regulates the expression of the antibody encoded by the nucleic acid molecule.

78. A host cell comprising the nucleic acid molecule of claim 77.

79. A cell line engineered to express the antibody of any one of claims 1 through 78.

80. An antibody that binds the same epitope as the antibody of any one of claims 1 through 79.

81. An antibody that competitively inhibits the binding of the antibody produced by the cell line having ATCCDeposit Number PTA-3239.

82. An antibody that competitively inhibits the binding of the antibody produced by the cell line having ATCCDeposit Number PTA-3240

83. An antibody that competitively inhibits the binding of the antibody produced by the cell line having ATCCDeposit Number PTA-3243.

84. An second antibody that reduces the binding of the antibody of any one of claims 1 through 83 by a an increment within a percentage range selected from the group consisting of:

- (a) from 50% up to 60%;

- (b) from 60% up to 70%;
- (c) from 70% up to 80%;
- (d) from 80% up to 90%; and
- (e) from 90% up to 100%.

85. An antibody that immunospecifically binds to BLyS, said antibody comprising an amino acid sequence of a VH domain encoded by a nucleotide sequence that hybridizes under stringent conditions to a nucleotide sequence encoding a VH domain of an scFv comprising an amino acid sequence of any one of SEQ ID NOS: 1 to 2128.

86. An antibody that immunospecifically binds to BLyS, said antibody comprising an amino acid sequence of a VL domain encoded by a nucleotide sequence that hybridizes under stringent conditions to a nucleotide sequence encoding a VL domain from an scFv comprising an amino acid sequence of any one of SEQ ID NOS: 1 to 2128.

87. A method for detecting aberrant expression of BLyS protein, comprising:

- (a) assaying the level of BLyS expression in a first biological sample of an individual using one or more antibodies of any one of claims 1 through 86; and
- (b) comparing the level of BLyS assayed in biological sample with a standard level of BLyS expression or level of BLyS in a second, normal biological sample;
- (c) wherein an increase or decrease in the assayed level of BLyS in the first biological sample compared to the standard level of BLyS expression or level of BLyS in a second, normal biological sample, is indicative of aberrant expression.

88. A method for diagnosing a disease or disorder associated with aberrant BLyS expression or activity, comprising:

- (a) administering to a subject an effective amount of a labeled antibody of any one of claims 52 through 58 that immunospecifically binds to BLyS;

(b) waiting for a time interval following the administering for permitting the labeled antibody of any one of claims 52 through 58 to preferentially concentrate at sites in the subject where BLYS is expressed;

(c) determining background level; and

(d) detecting the labeled antibody of any one of claims 52 through 58 in the subject, such that detection of labeled antibody above the background level indicates that the subject has a particular disease or disorder associated with aberrant expression of BLYS.

89.A method of treating, preventing or ameliorating a disease or disorder associated with aberrant BLYS expression or activity, comprising administering to an animal in need thereof, the pharmaceutical composition of claim 73 in an amount effective to treat, prevent or ameliorate the disease or disorder.

90. The method of claim 89, wherein the disease or disorder is cancer.

91. The method of claim 89, wherein the disease or disorder of the immune system.

92. The method of claim 91, wherein the disease or disorder of the immune system is an autoimmune disease or disorder.

93. The method of claim 92, wherein the disease or disorder of the immune system is an autoimmune disease or disorder selected from the group consisting of:

(a) Systemic Lupus Erythematosus; and

(b) Rheumatoid Arthritis.

94. The method of claim 91, wherein the disease or disorder of the immune system is an immunodeficiency.

95. The method of claim 92, wherein the disease or disorder of the immune system is an immunodeficiency selected from the group consisting of:

- (a) Common Variable Immunodeficiency (CVID); and
- (b) AIDS.

96. The method of claim 91, wherein the disease or disorder of the immune system is cancer.

1/16

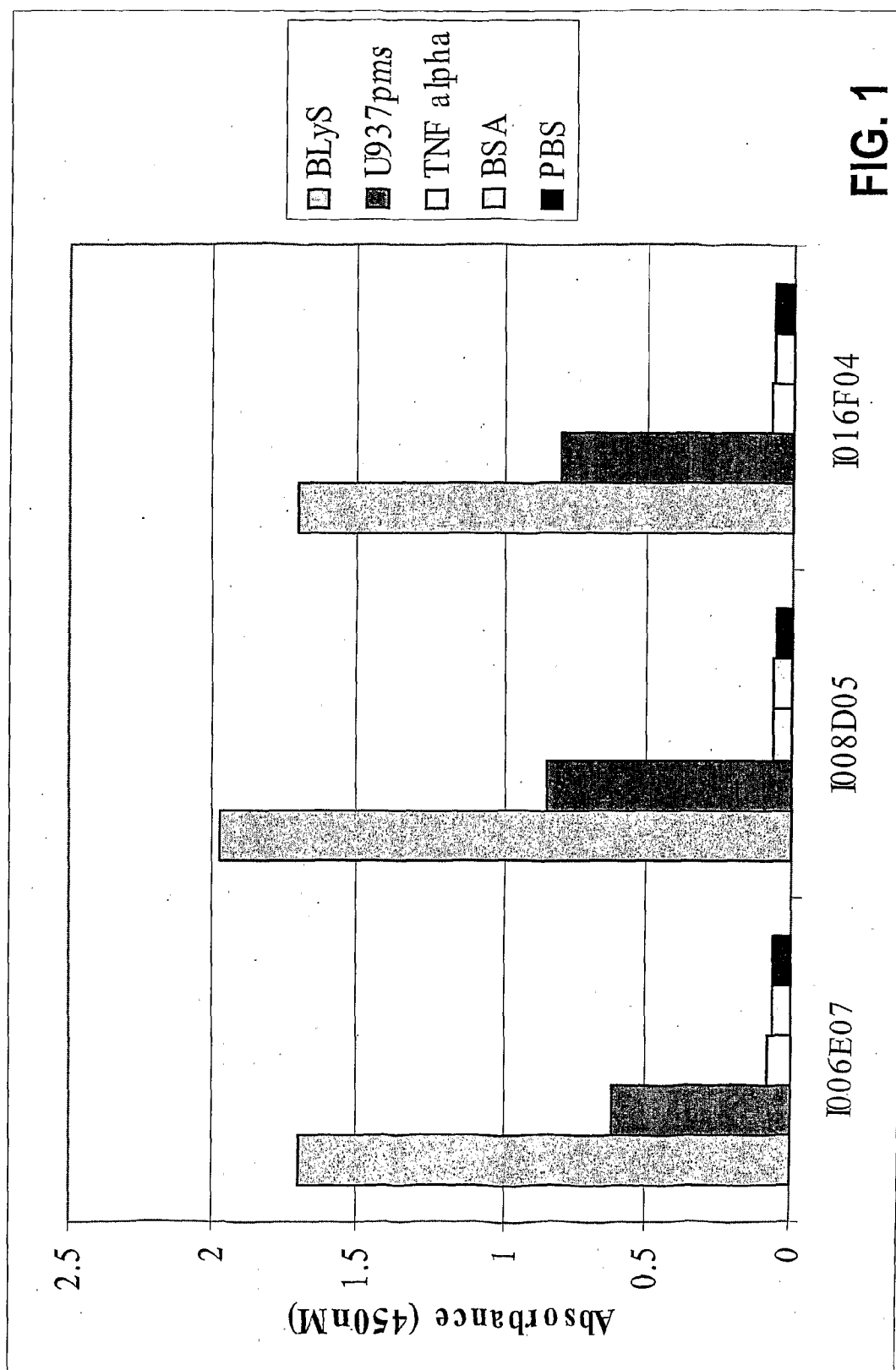
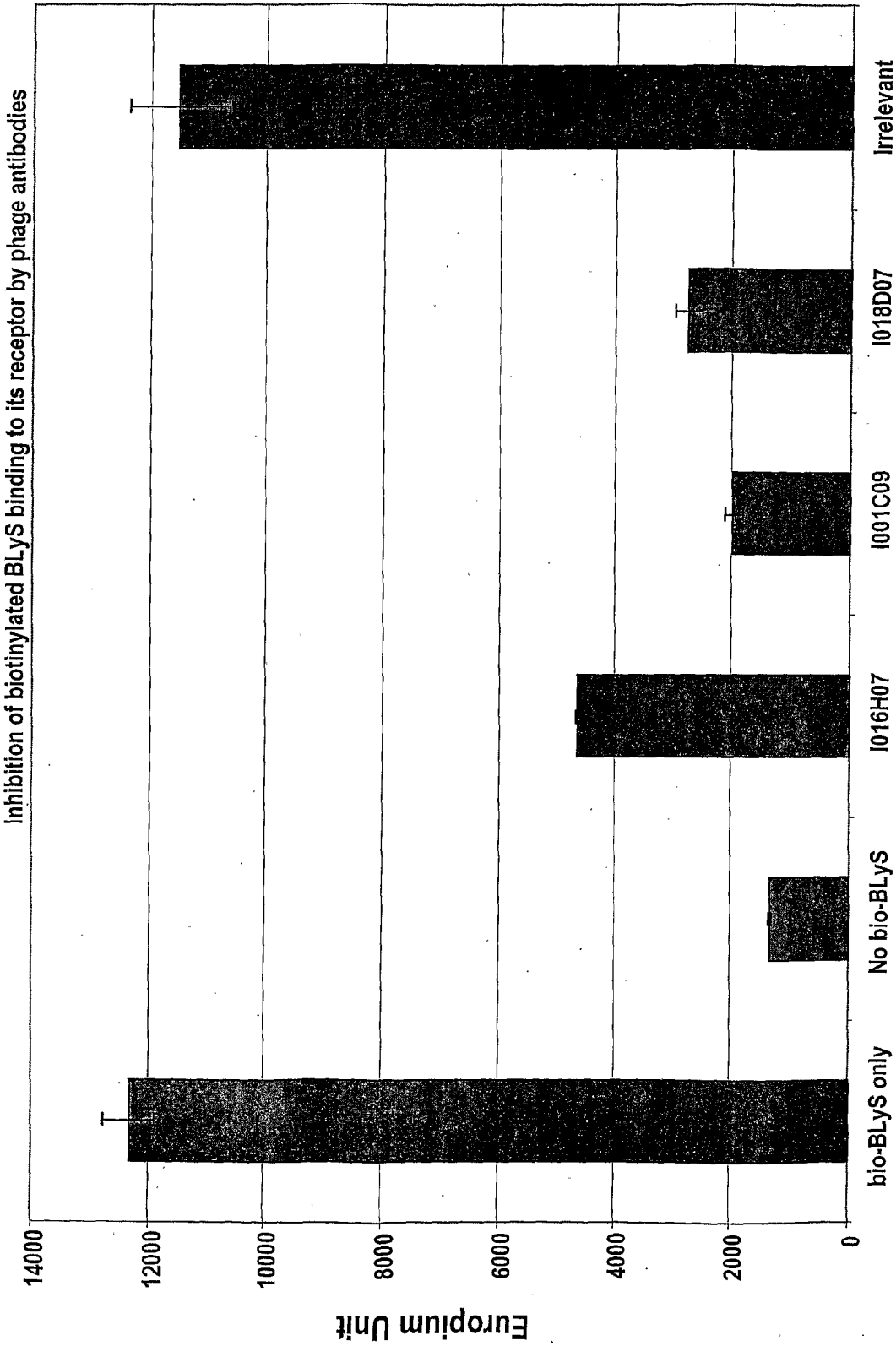


FIG. 2



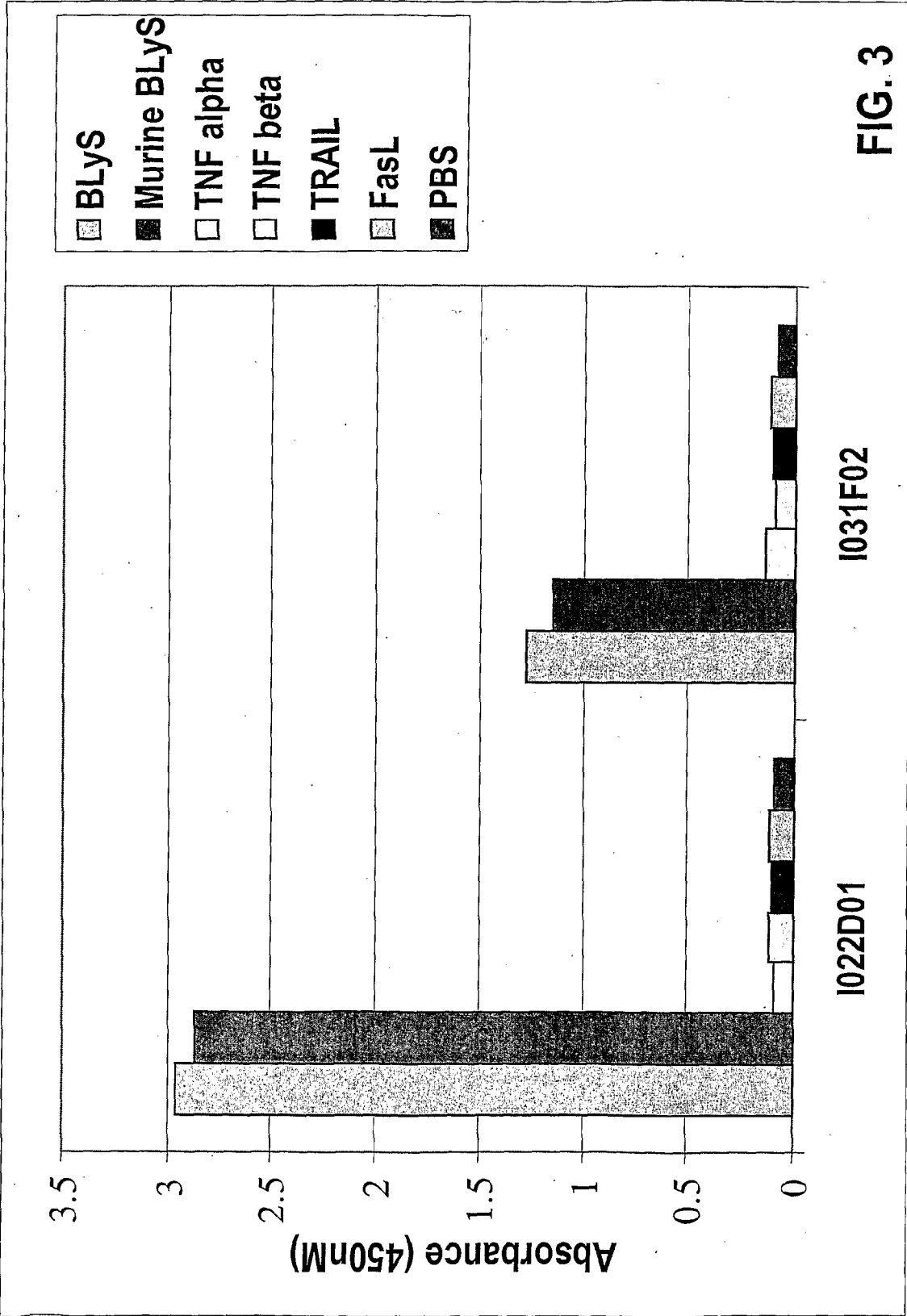
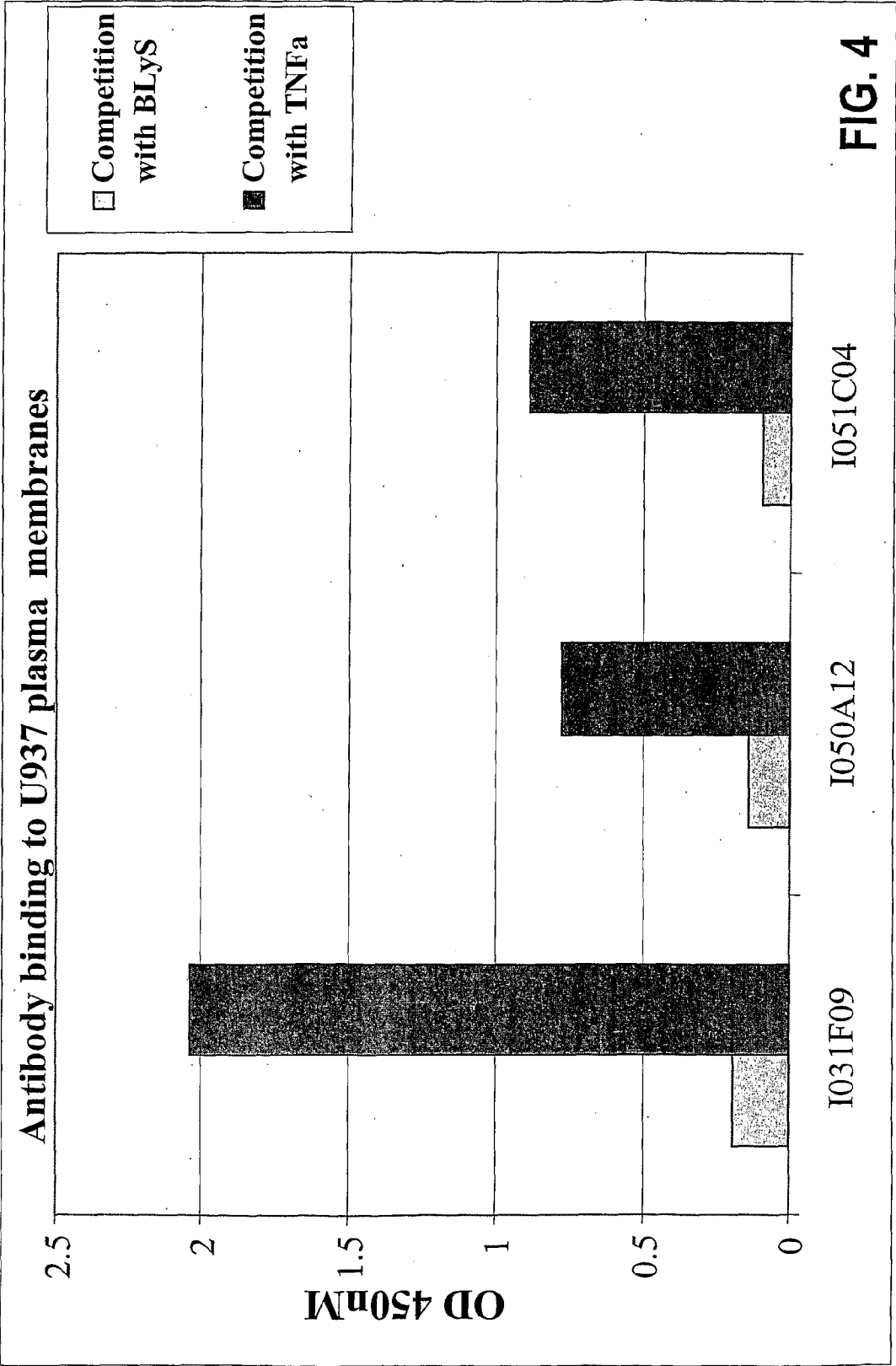
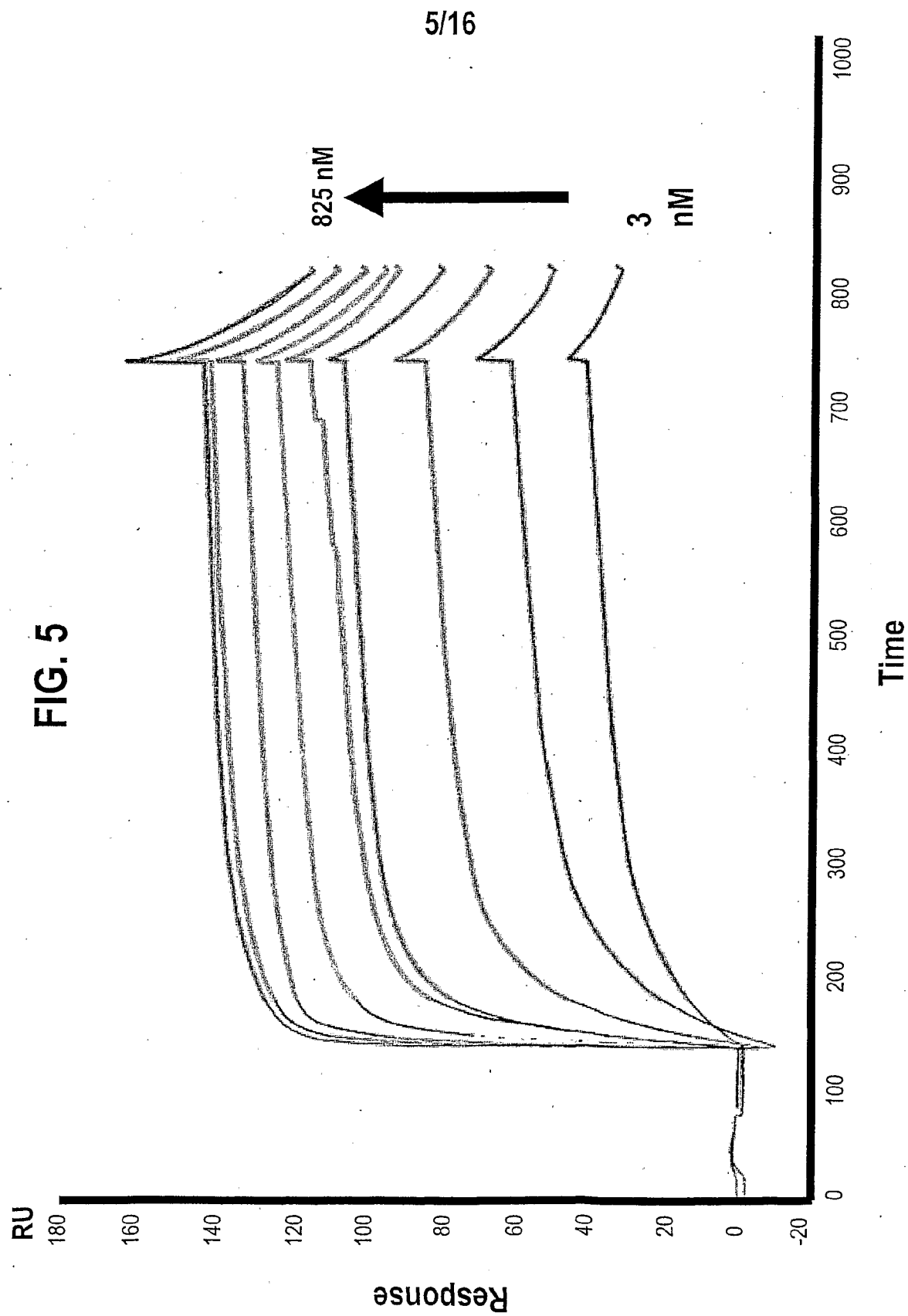
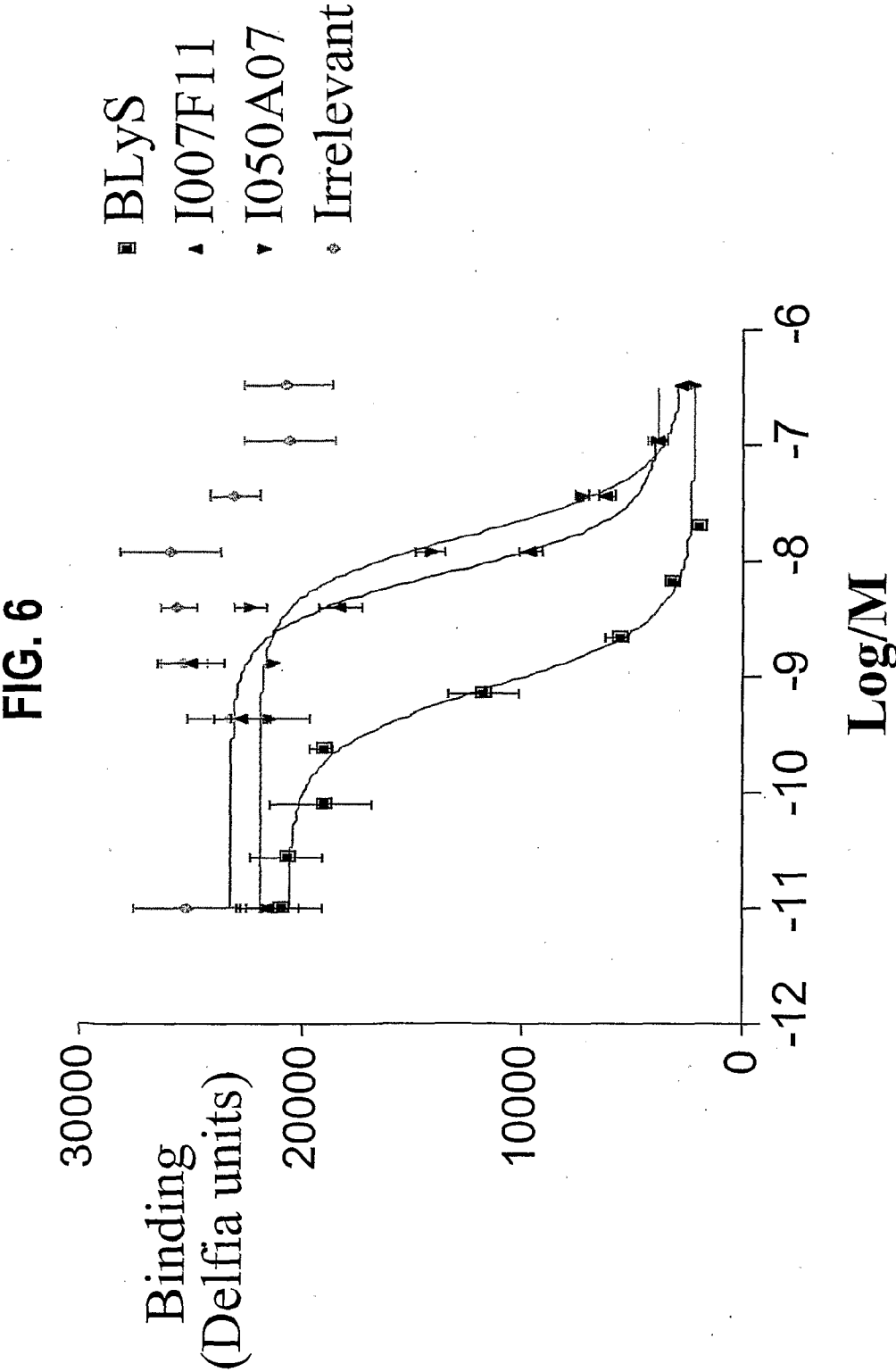


FIG. 3







7/16

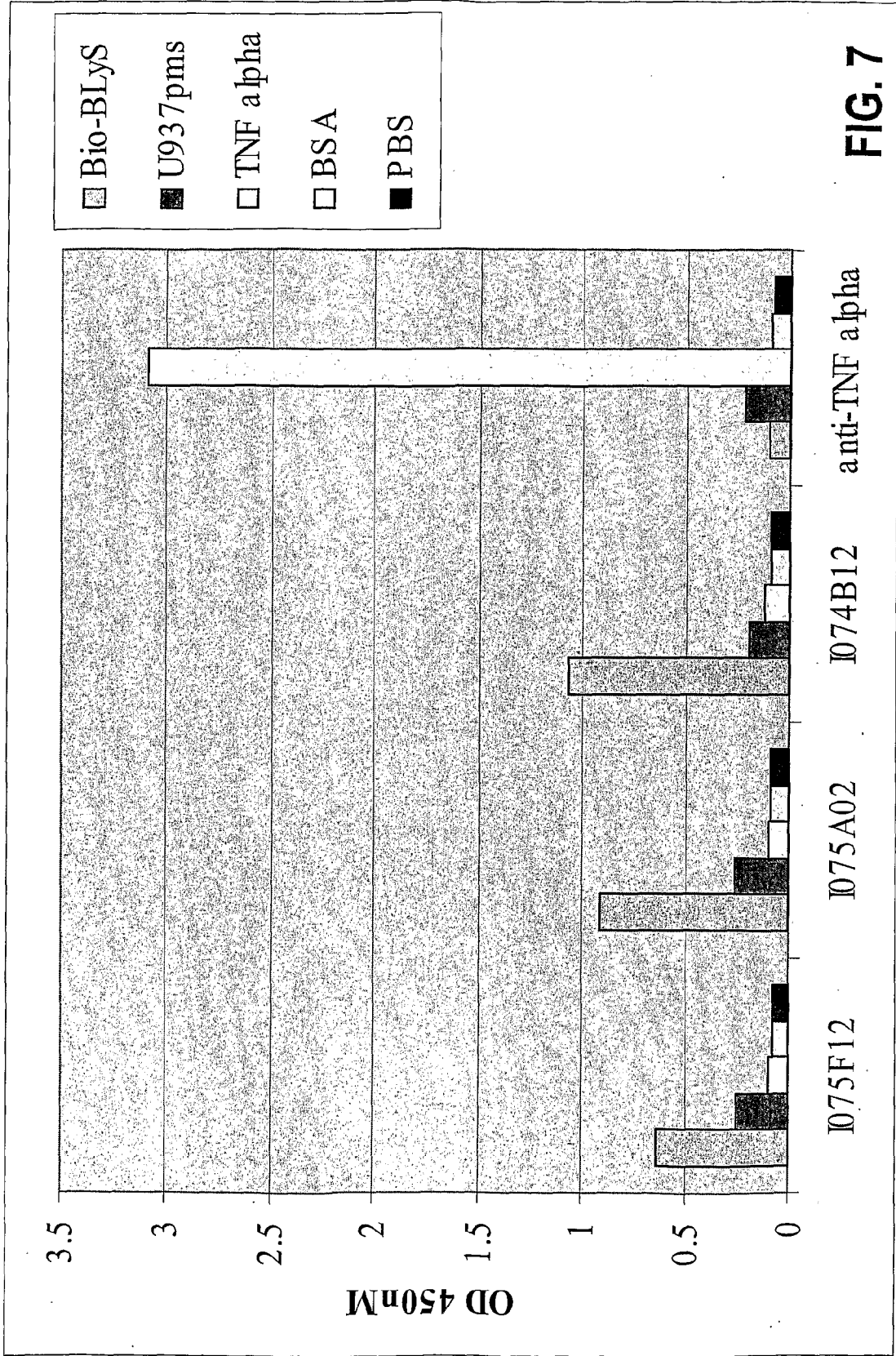
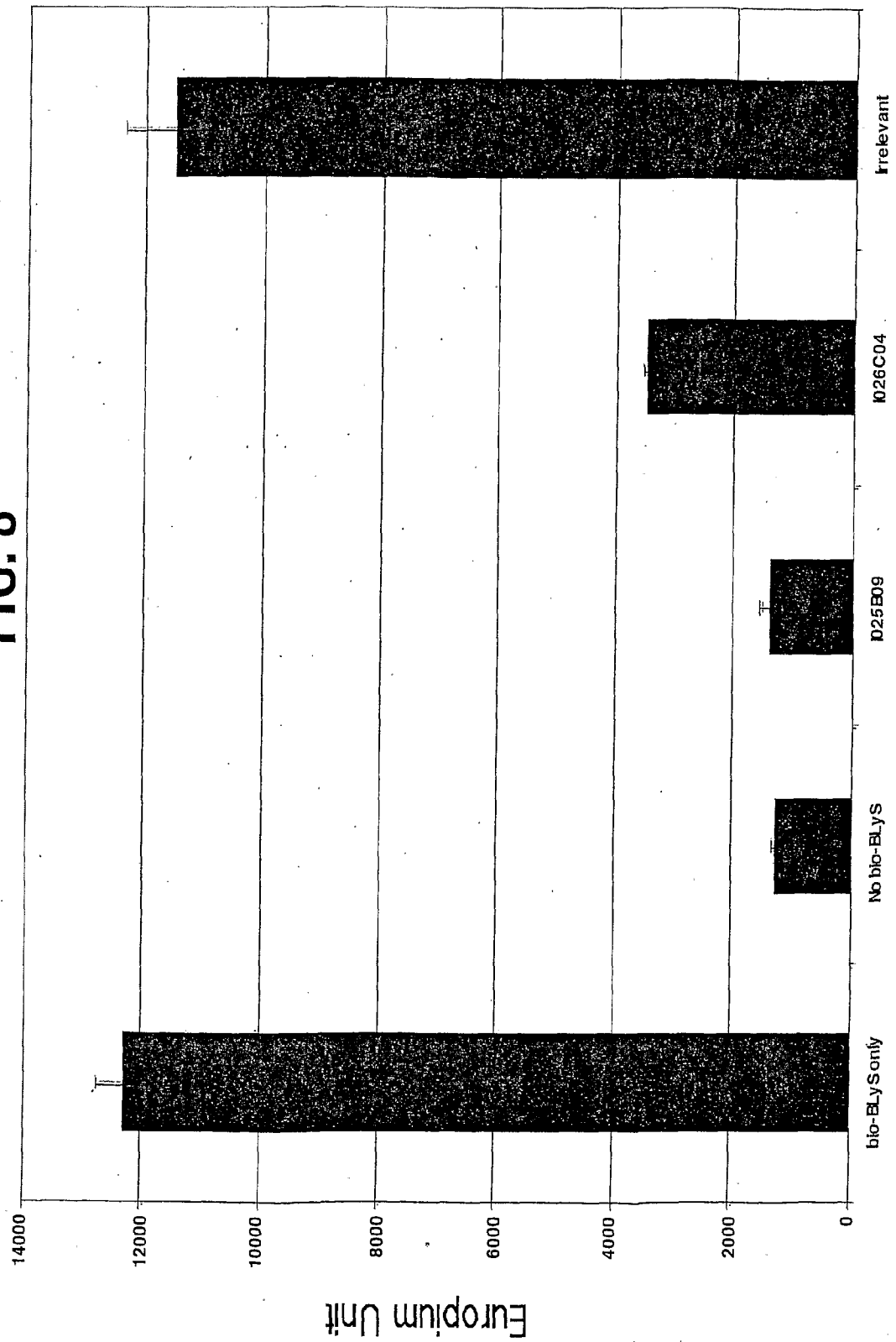


FIG. 7

8/16

FIG. 8



9/16

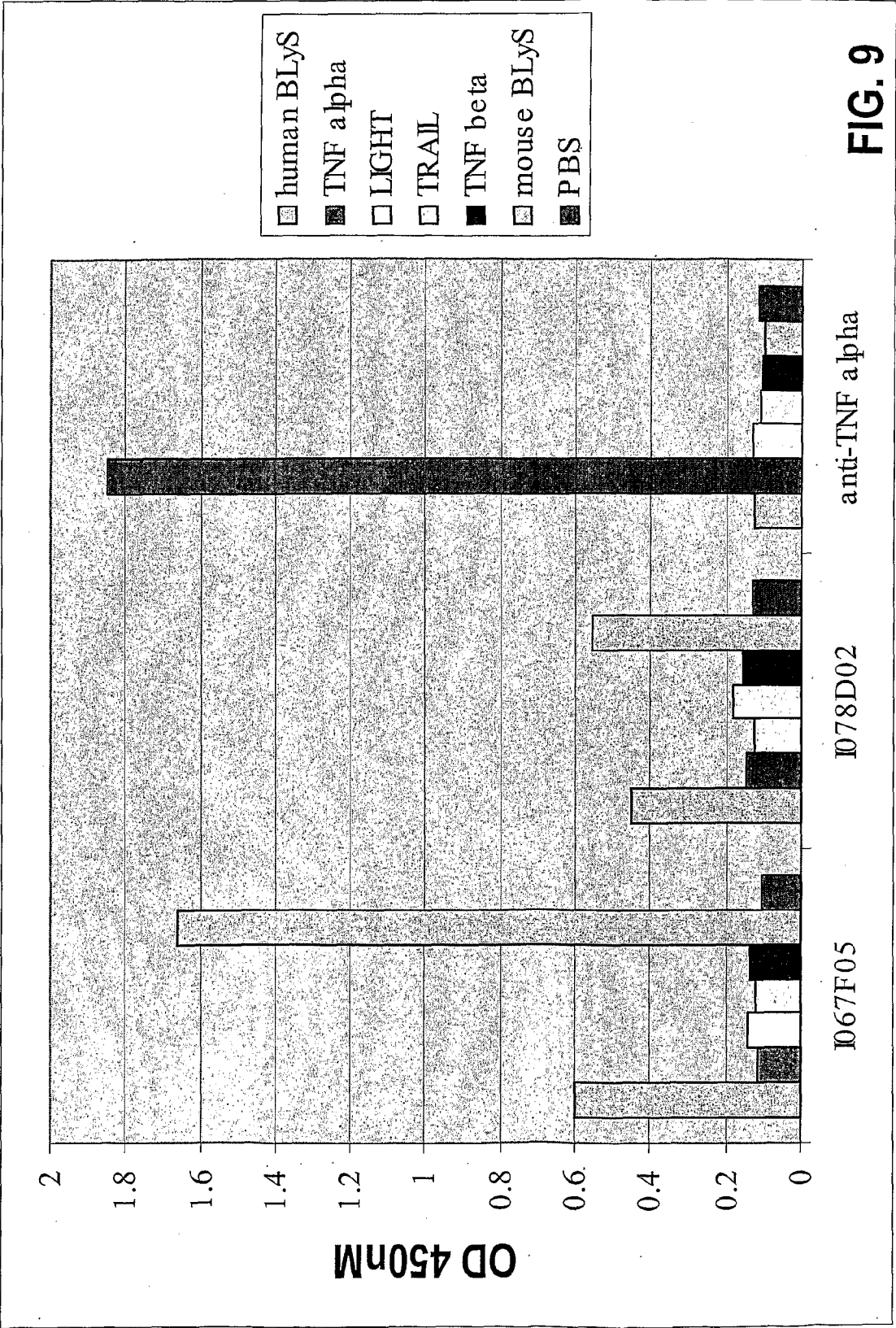
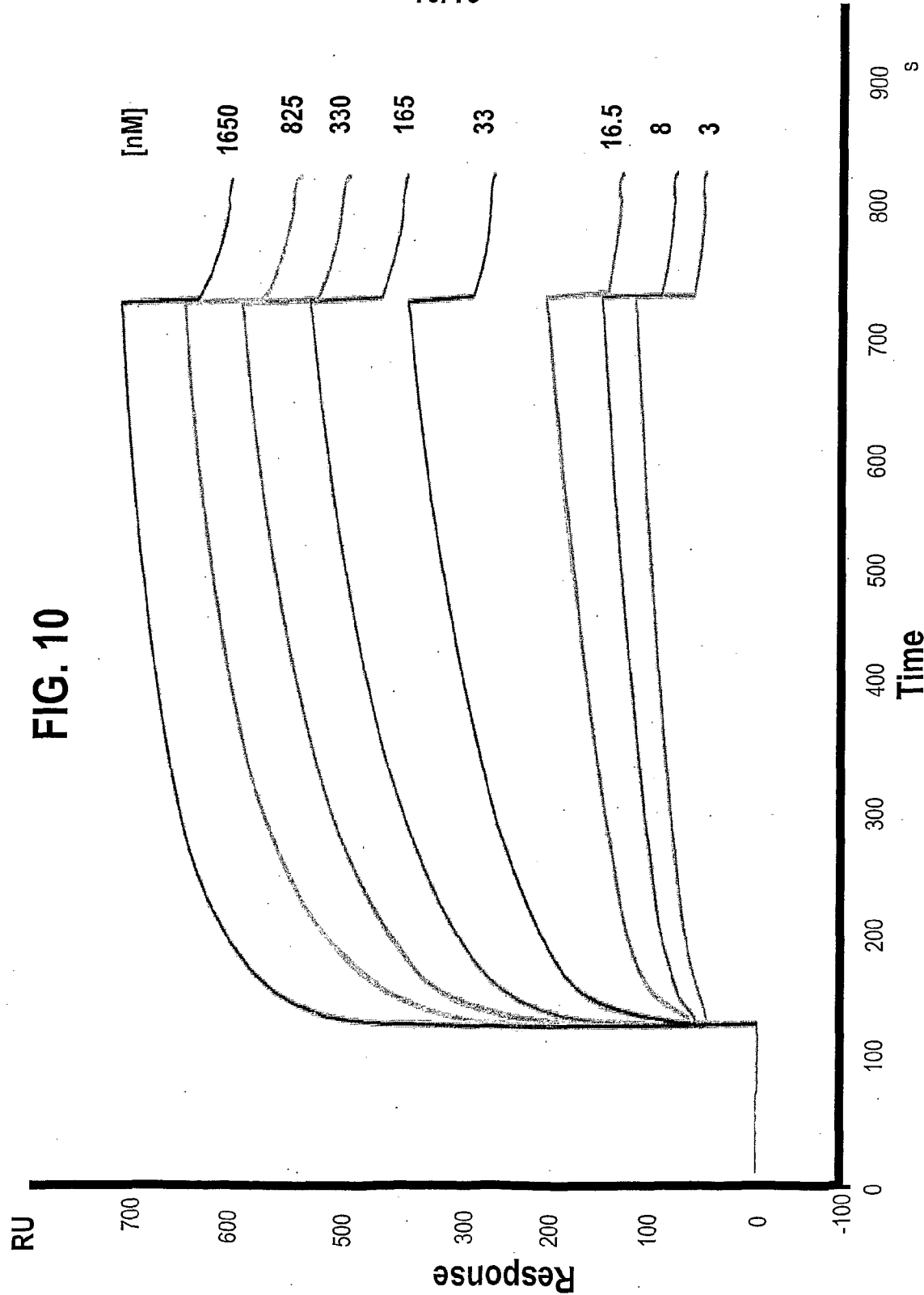
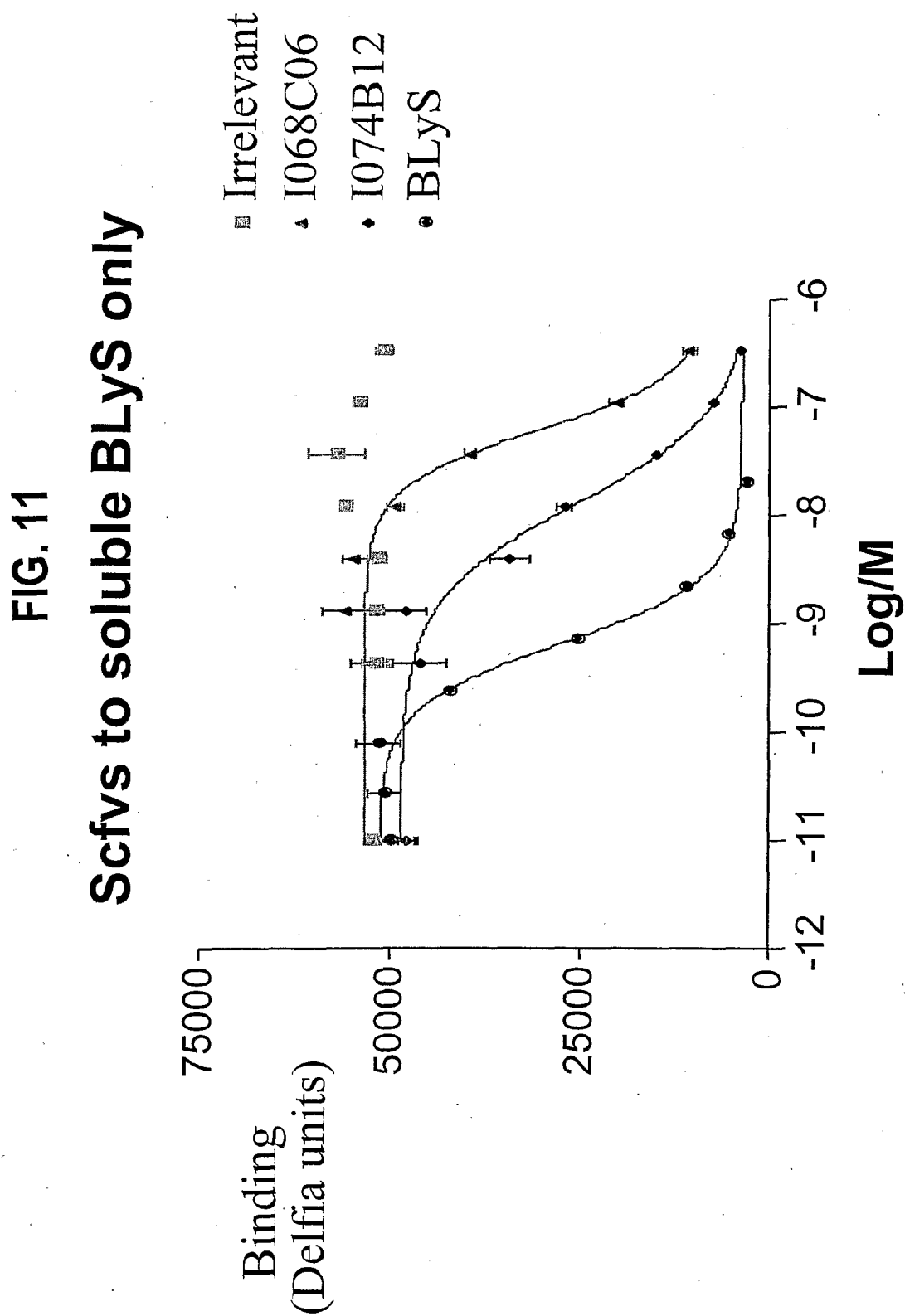


FIG. 9

10/16



11/16



12/16

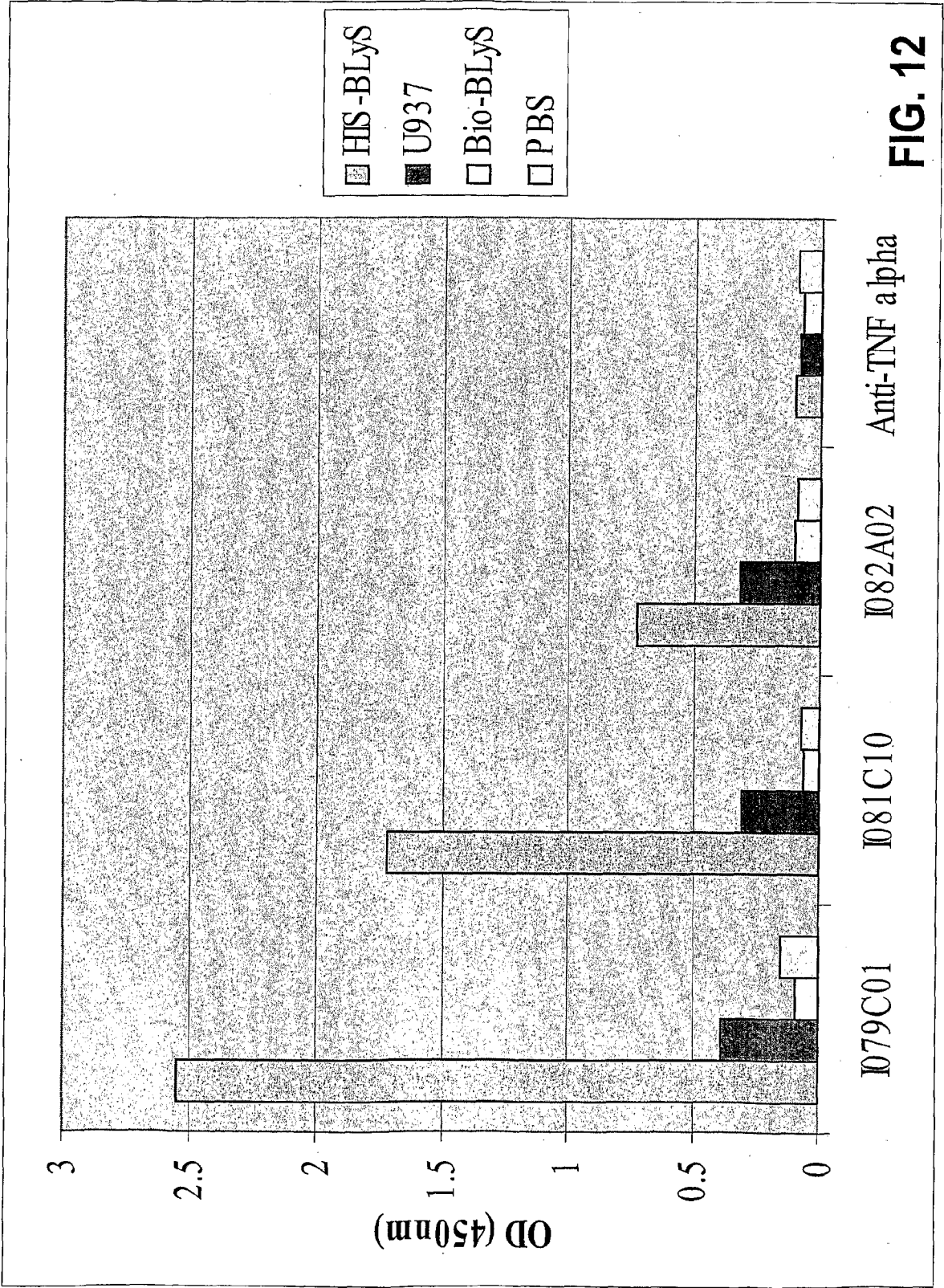
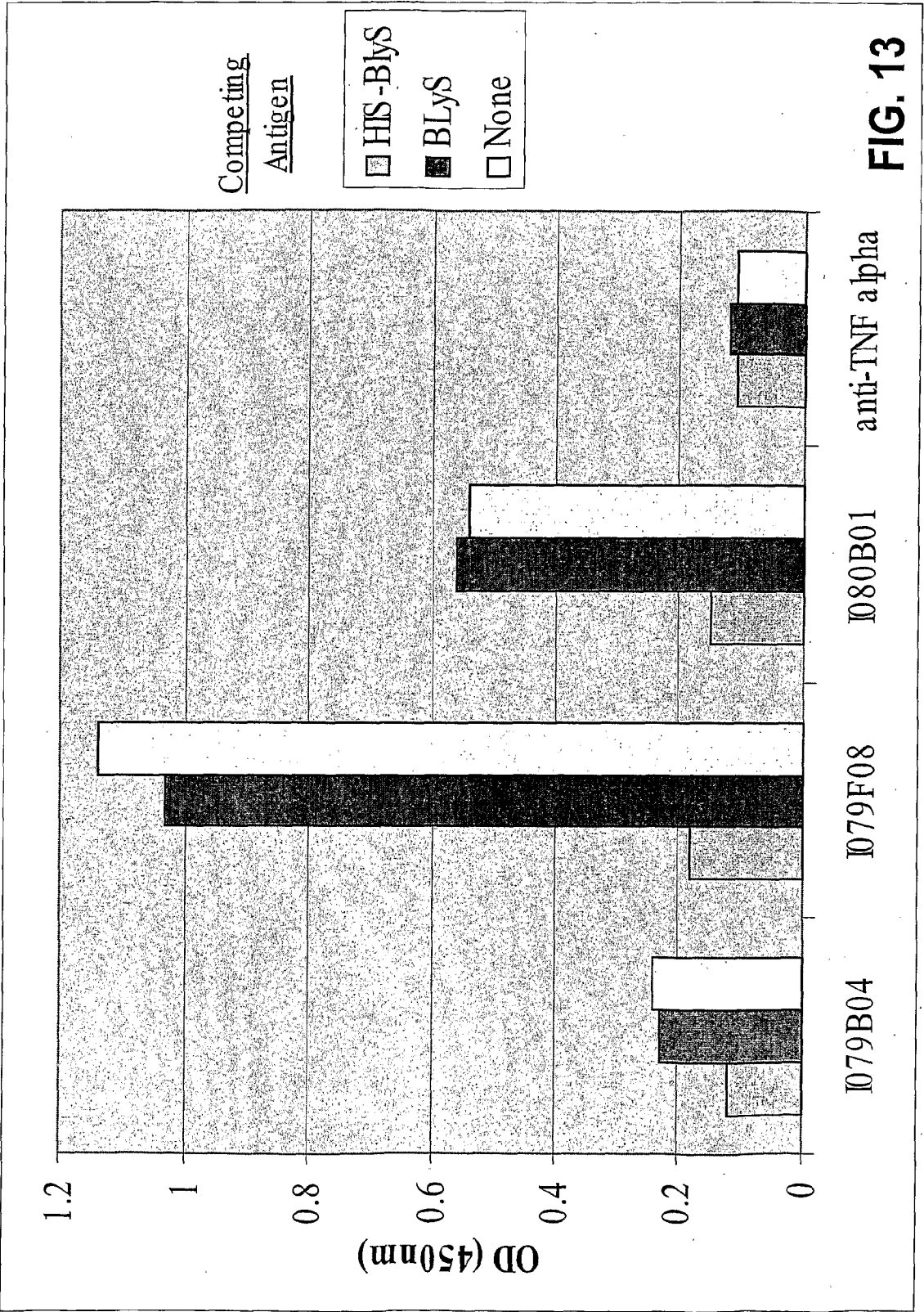


FIG. 12



14/16

FIG. 14
Plate I079 Sensorgram - 8 Clones

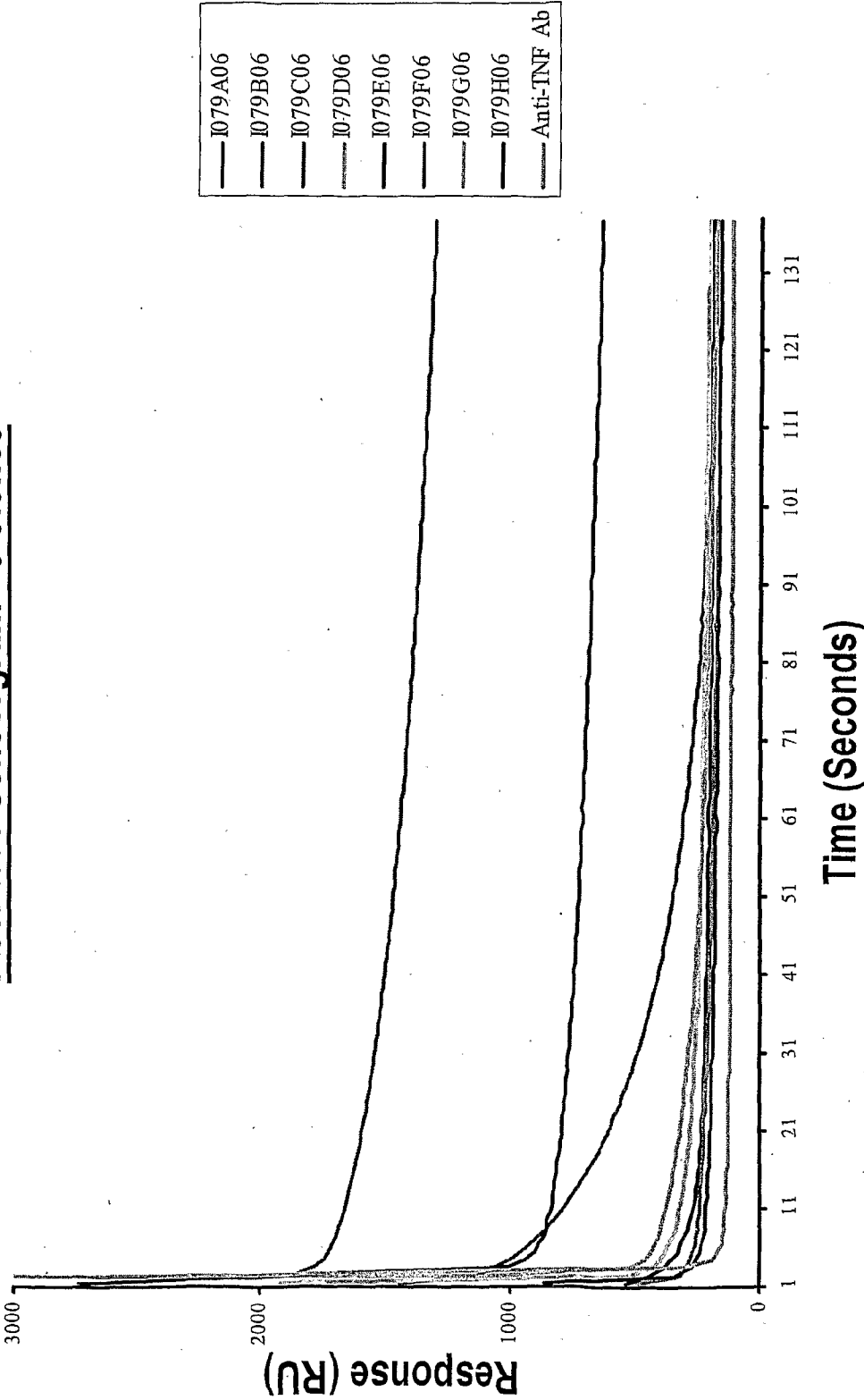
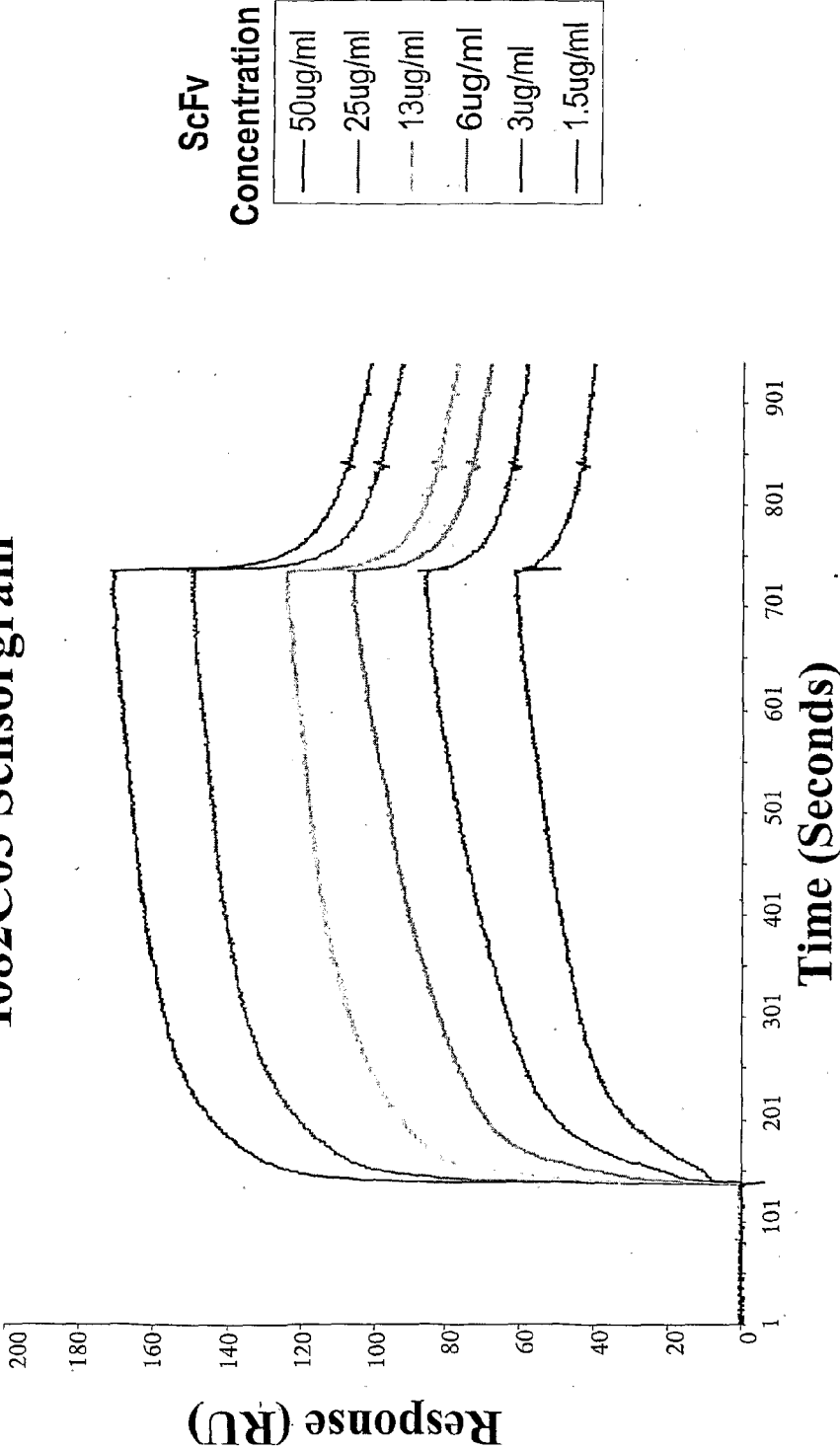
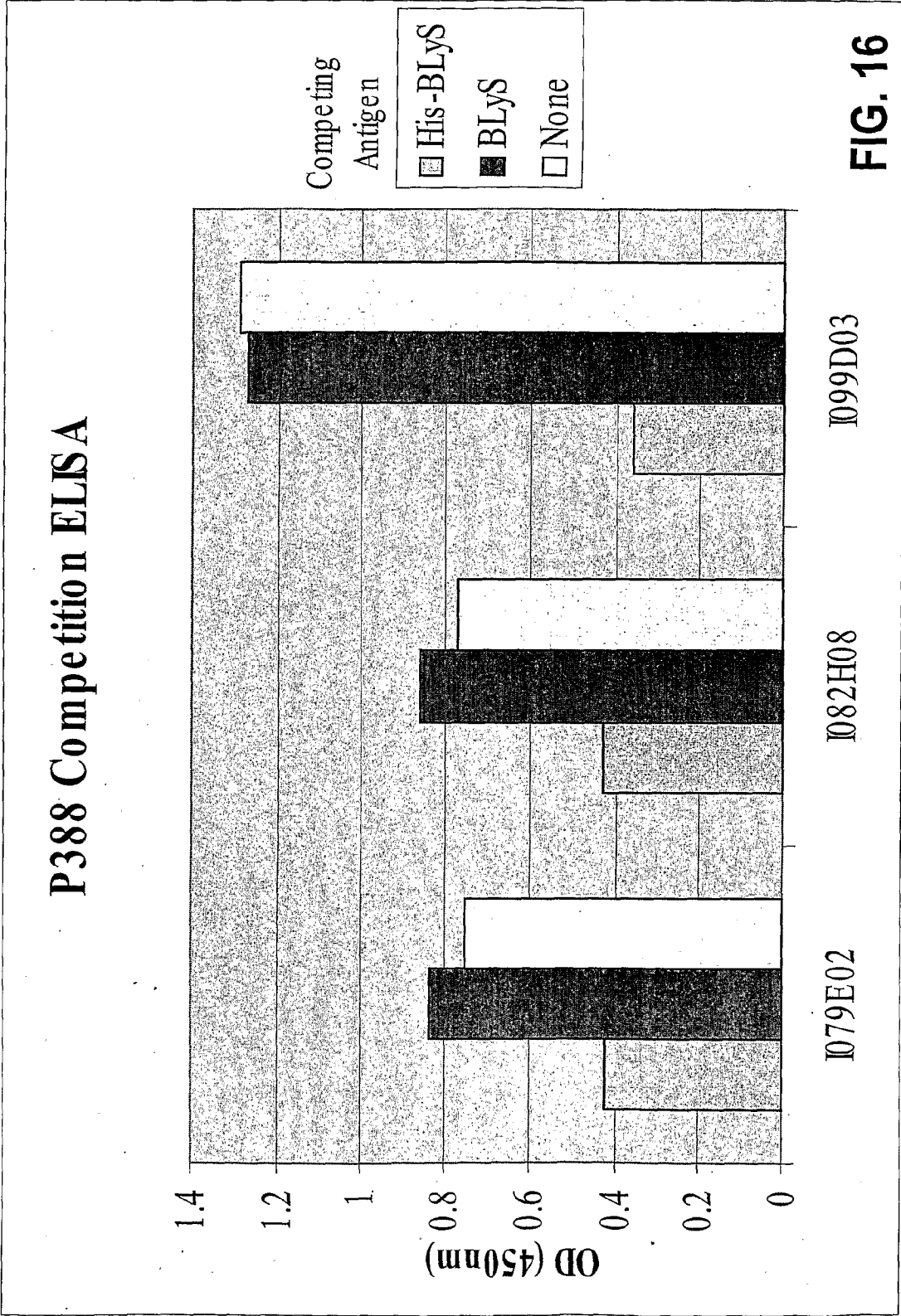


FIG. 15
I082C03 Sensorgram





SEQUENCE LISTING

<110> Human Genome Sciences, Inc.

<120> Antibodies that Immunospecifically Bind BLyS

<130> PF523PCT

<140> Not yet assigned

<141> 2001-06-15

<150> 60/212,210

<151> 2000-06-15

<150> 60/240,816

<151> 2000-10-17

<150> 60/276,248

<151> 2001-03-16

<150> 60/277,379

<151> 2001-03-21

<150> 60/293,499

<151> 2001-05-25

<160> 3239

<170> PatentIn Ver. 2.0

<210> 1

<211> 248

<212> PRT

<213> Homo sapiens

<400> 1

Gln Val Gln Leu Leu Gln Ser Ala Ala Glu Leu Lys Lys Pro Gly Gln
1 5 10 15

Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Phe Thr Phe Thr Thr Tyr
20 25 30

Trp Ile Gly Trp Val Arg Gln Leu Pro Gly Lys Gly Leu Glu Trp Met
35 40 45

Gly Ile Ile Tyr Pro Gly Asp Ser His Thr Thr Tyr Ser Pro Ser Phe
50 55 60

Glu Gly His Val Asn Ile Ser Val Asp Lys Ser Ile Asn Thr Ala Tyr
65 70 75 80

Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
 85 90 95

Ala Arg His Asp Asp Asp Val Leu Thr Gly Tyr Tyr Phe Glu Ser Trp
 100 105 110

Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
 115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Ser Val Leu Thr Gln Pro
 130 135 140

Ala Ser Val Ser Gly Ser Pro Gly Gln Ser Ile Thr Ile Ser Cys Thr
 145 150 155 160

Gly Thr Ser Ser Asp Val Gly Gly Tyr Asn Tyr Val Ser Trp Tyr Gln
 165 170 175

Gln His Pro Gly Lys Ala Pro Lys Leu Met Ile Tyr Glu Gly Ser Lys
 180 185 190

Arg Pro Ser Gly Val Ser Asn Arg Phe Ser Gly Ser Lys Ser Gly Asn
 195 200 205

Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln Ala Glu Asp Glu Ala Asp
 210 215 220

Tyr Tyr Cys Ser Ser Tyr Thr Thr Arg Ser Thr Arg Val Phe Gly Gly
 225 230 235 240

Gly Thr Lys Leu Thr Val Leu Gly
 245

<210> 2

<211> 249

<212> PRT

<213> Homo sapiens

<400> 2

Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser
 1 5 10 15

Ser Val Arg Val Ser Cys Lys Ala Ser Gly Gly Thr Phe Asn Asn Asn
 20 25 30

Ala Ile Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met

35 40 45
 Gly Gly Ile Ile Pro Met Phe Gly Thr Ala Lys Tyr Ser Gln Asn Phe
 50 55 60
 Gln Gly Arg Val Ala Ile Thr Ala Asp Glu Ser Thr Ser Thr Ala Ser
 65 70 75 80
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Ser Arg Asp Leu Leu Leu Phe Pro His Tyr Gly Met Asp Val
 100 105 110
 Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser
 115 120 125
 Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Phe Ser Ser Glu Leu
 130 135 140
 Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Val
 145 150 155 160
 Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala Ser Trp Tyr Gln
 165 170 175
 Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Gly Lys Asn Asn
 180 185 190
 Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn
 195 200 205
 Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp
 210 215 220
 Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Trp Val Phe Gly
 225 230 235 240
 Gly Gly Thr Glu Leu Thr Val Leu Gly
 245

<210> 3
 <211> 254
 <212> PRT
 <213> Homo sapiens

<400> 3

Gln Val Gln Leu Gln Gln Ser Gly Pro Gly Leu Val Lys Pro Ser Gln
 1 5 10 15

Ile Leu Ser Leu Thr Cys Ala Ile Ser Gly Asp Ser Val Ala Ser Asn
 20 25 30

Gly Ala Ala Trp Asn Trp Ile Arg Gln Ser Pro Ser Arg Gly Leu Glu
 35 40 45

Trp Leu Gly Arg Thr Tyr Tyr Arg Ser Lys Trp Tyr Val Asp Tyr Ala
 50 55 60

Val Ser Val Lys Ser Arg Ile Thr Ile Asn Pro Asp Thr Ser Lys Asn
 65 70 75 80

Gln Phe Ser Leu Gln Leu Asn Ser Val Thr Pro Glu Asp Thr Ala Val
 85 90 95

Tyr Tyr Cys Ala Arg Asp Arg Tyr Asp Ile Leu Thr Gly Tyr Tyr Tyr
 100 105 110

Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser
 115 120 125

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln
 130 135 140

Ser Ala Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Arg Gly Gln Ser
 145 150 155 160

Ile Thr Ile Ser Cys Thr Gly Thr Thr Gly Asp Val Gly Gly Tyr Asp
 165 170 175

Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys Leu Leu
 180 185 190

Ile Tyr Gly Asn Ser Asn Arg Pro Ser Gly Val Pro Asp Arg Phe Ser
 195 200 205

Ala Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly Leu Gln
 210 215 220

Ala Glu Asp Glu Ala Asp Tyr Phe Cys Ser Thr Tyr Ala Pro Pro Gly

225

230

235

240

Ile Ile Met Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly
 245 250

<210> 4

<211> 255

<212> PRT

<213> Homo sapiens

<400> 4

Arg Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Asp
 20 25 30

His Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45

Gly Trp Ile Ser Pro His His Gly Lys Thr Asn Tyr Ala Gln Lys Leu
 50 55 60

Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Val Gln Met Asp Ser Glu Tyr Tyr Asp Leu Leu Thr Gly Ile
 100 105 110

Asn Val Gly Pro Tyr Tyr Phe Asp Tyr Trp Gly Lys Gly Thr Leu Val
 115 120 125

Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
 130 135 140

Gly Gly Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu
 145 150 155 160

Gly Gln Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr
 165 170 175

Tyr Ala Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val
 180 185 190

Ile Tyr Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser
 195 200 205

Gly Ser Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln
 210 215 220

Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly
 225 230 235 240

Asn His Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly
 245 250 255

<210> 5
 <211> 249
 <212> PRT
 <213> Homo sapiens

<400> 5
 Glu Val Asn Leu Arg Glu Ser Gly Gly Gly Val Asp Gln Pro Gly Arg
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
 20 25 30

Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
 35 40 45

Ala Val Ile Ser Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val
 50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Lys Asp Gly Tyr Tyr Asp Ile Leu Thr Gly Tyr Ser Tyr Tyr Gly
 100 105 110

Met Asp Val Trp Gly Gln Gly Pro Met Val Ala Val Ser Ser Gly Gly
 115 120 125

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ser Glu Leu
 130 135 140

Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln Thr Val Arg Ile
 145 150 155 160

Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Thr Asn Trp Phe Gln
 165 170 175

Gln Lys Pro Gly Gln Ala Pro Leu Leu Val Val Tyr Ala Lys Asn Lys
 180 185 190

Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly Asn
 195 200 205

Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala Asp
 210 215 220

Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His Val Val Phe Gly
 225 230 235 240

Gly Gly Thr Lys Leu Thr Val Leu Gly
 245

<210> 6
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 6
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Arg Lys Pro Gly Ser
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Ser Phe Ser Ser His
 20 25 30

Val Phe Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Gly Ile Thr Pro Lys Phe Ala Thr Pro Asn Tyr Ala Gln Lys Phe
 50 55 60

Gln His Arg Val Thr Ile Thr Ala Asp Glu Leu Thr Arg Thr Val Phe
 65 70 75 80

Met Asp Leu Ser Gly Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Gly Tyr Asp Ser Ser Ala Phe Arg Ala Phe Asp Ile Trp Gly
 100 105 110

Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly
 115 120 125

Gly Gly Ser Gly Gly Gly Gly Ser Ala Gln Ser Val Leu Thr Gln Pro
 130 135 140

Pro Ser Val Ser Gly Ala Pro Gly Gln Arg Val Thr Ile Ser Cys Thr
 145 150 155 160

Gly Ser Ser Ser Asn Ile Gly Ala Gly Tyr Asp Val Gln Trp Tyr Gln
 165 170 175

Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu Ile His Gly Asn Asn Asn
 180 185 190

Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr
 195 200 205

Ser Ala Ser Leu Ala Ile Thr Gly Leu Gln Asp Glu Asp Glu Ala Asp
 210 215 220

Tyr Tyr Cys Gln Ser Tyr Asp Ser Ser Leu Ser Phe Ser Gly Tyr Val
 225 230 235 240

Phe Gly Thr Gly Thr Lys Val Thr Val Leu Gly
 245 250

<210> 7
 <211> 250
 <212> PRT
 <213> Homo sapiens

<400> 7
 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Asp Thr Phe Ser His Tyr
 20 25 30

Ala Ile Asn Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45

Gly Gly Ile Ile Pro Thr Phe Asn Ala Val Lys Tyr Ala Gln Lys Phe

50 55 60
 Gln Gly Arg Ala Thr Ile Thr Ala Asp Gly Ser Thr Ser Thr Ala Tyr
 65 70 75 80
 Met Glu Leu Asn Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Thr Ala Pro Tyr Asp Leu Leu Thr His Tyr Phe His Tyr Phe Asp
 100 105 110
 Tyr Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly
 115 120 125
 Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Ser Ser Glu
 130 135 140
 Leu Thr Gln Asp Pro Ala Val Ser Val Thr Leu Gly Gln Thr Val Arg
 145 150 155 160
 Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Pro Ser Trp Tyr
 165 170 175
 Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr Pro Lys Asn
 180 185 190
 Ile Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser Ser Ser Gly
 195 200 205
 Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu Asp Glu Ala
 210 215 220
 Asp Tyr Tyr Cys Asn Ser Arg Ala Ser Ser Gly Asn His Tyr Val Phe
 225 230 235 240
 Ala Thr Gly Thr Lys Leu Thr Val Leu Gly
 245 250

<210> 8
 <211> 256
 <212> PRT
 <213> Homo sapiens

<400> 8
 Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ser
 1 5 10 15

Ser Val Lys Val Ser Cys Arg Thr Ser Gly Gly Thr Phe Ser Asn Tyr
 20 25 30

Gly Leu Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met
 35 40 45

Gly Gly Val Ile Pro Ile Ser Ser Thr Ile Lys Tyr Gly Gln Lys Phe
 50 55 60

Gln Asp Arg Leu Thr Ile Ala Ala Asp Asp Leu Thr Asn Thr Thr Phe
 65 70 75 80

Met Glu Leu Ser Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Ala Ala Thr Thr Ser Gln Lys His Asn Lys Tyr Ala Tyr Tyr
 100 105 110

Phe Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Met Val Thr Val Ser
 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
 130 135 140

Ala Gln Ser Ala Leu Thr Gln Pro Ala Ser Val Ser Gly Ser Pro Gly
 145 150 155 160

Gln Ser Ile Thr Ile Ser Cys Thr Gly Thr Ser Ser Asp Val Gly Gly
 165 170 175

Tyr Asn Tyr Val Ser Trp Tyr Gln Gln His Pro Gly Lys Ala Pro Lys
 180 185 190

Leu Met Ile Tyr Glu Val Ser Asn Arg Pro Ser Gly Val Ser Asn Arg
 195 200 205

Phe Ser Gly Ser Lys Ser Gly Asn Thr Ala Ser Leu Thr Ile Ser Gly
 210 215 220

Leu Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Ser Ser Tyr Thr Ser
 225 230 235 240

Ser Ser Thr Leu Val Phe Gly Gly Gly Thr Lys Val Thr Val Leu Gly

245

250

255

<210> 9

<211> 251

<212> PRT

<213> Homo sapiens

<400> 9

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 10

<211> 251

<212> PRT

<213> Homo sapiens

<400> 10

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Val Trp
 100 105 110

Val Ala Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 11
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 11
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Val Trp
 100 105 110

Val Ala Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Lys Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 12
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 12
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr

[illegible]

```
<210> 13
<211> 251
<212> PRT
<213> Homo sapiens
```

<400> 13
Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Gly Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Lys Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 14

<211> 251

<212> PRT

<213> Homo sapiens

<400> 14

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Arg Tyr Val Phe Gln Val Trp
 100 105 110

Val Ala Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 15
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 15
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Gly Tyr Val Phe Gln Val Trp
 100 105 110

Val Ala Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 16

<211> 251

<212> PRT

<213> Homo sapiens

<400> 16

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Arg Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Lys Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 17
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 17
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys

	85		90		95
Ala Arg Pro Phe Tyr Asp Thr Leu Thr Gly Tyr Val Phe Gln Tyr Phe	100		105		110
Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly	115		120		125
Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr	130		135		140
Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg	145		150		155
Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val	165		170		175
Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr	180		185		190
Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser	195		200		205
Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu	210		215		220
Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr	225		230		235
Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg	245		250		
<210> 18					
<211> 251					
<212> PRT					
<213> Homo sapiens					
<400> 18					
Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala	1		5		10
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His	20		25		30
Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val	35		40		45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Arg Tyr Val Phe Gln Val Trp
 100 105 110

Val Ala Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Lys Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 19

<211> 251

<212> PRT

<213> Homo sapiens

<400> 19

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Arg Tyr Val Phe Gln Val Trp
 100 105 110

Val Ala Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
245 250

<210> 20

<211> 251

<212> PRT

<213> Homo sapiens

<400> 20

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Gly Tyr Val Phe Gln Val Trp
100 105 110

Val Ala Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Lys Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 21

<211> 251

<212> PRT

<213> Homo sapiens

<400> 21

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Gly Tyr Val Phe Gln Val Trp
 100 105 110

Val Ala Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 22
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 22
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe

100 105 110
 Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125
 Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140
 Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160
 Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175
 Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190
 Gly Ala Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205
 Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220
 Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240
 Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250
 <210> 23
 <211> 251
 <212> PRT
 <213> Homo sapiens
 <400> 23
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30
 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45
 Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Lys Arg
145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
180 185 190

Gly Ala Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
195 200 205

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
245 250

<210> 24
<211> 251
<212> PRT
<213> Homo sapiens

<400> 24
Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Val Trp
100 105 110

Val Ala Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
180 185 190

Gly Ala Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
195 200 205

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
245 250

<210> 25

<211> 251

<212> PRT

<213> Homo sapiens

<400> 25

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Val Trp
 100 105 110

Val Ala Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Lys Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Ala Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 26
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 26
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Arg Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Ala Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 27
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 27
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Arg Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly

115 120 125
 Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

 Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Lys Arg
 145 150 155 160

 Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

 Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

 Gly Ala Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

 Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

 Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

 Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

 <210> 28
 <211> 251
 <212> PRT
 <213> Homo sapiens

 <400> 28
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

 Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

 Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Phe Tyr Asp Ile Leu Thr Ser Tyr Val Phe Gln Tyr Phe
100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
180 185 190

Gly Ala Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
195 200 205

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
245 250

<210> 29

<211> 251

<212> PRT

<213> Homo sapiens

<400> 29

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Ile Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Lys Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Ala Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 30
 <211> 251

<212> PRT

<213> Homo sapiens

<400> 30

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Ile Leu Thr Arg Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Ala Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 31
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 31
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Ile Leu Thr Arg Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Lys Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Ala Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 32
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 32
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Ile Leu Thr Arg Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr

130 135 140
 Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160
 Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175
 Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190
 Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205
 Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220
 Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240
 Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250
 <210> 33
 <211> 251
 <212> PRT
 <213> Homo sapiens
 <400> 33
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30
 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45
 Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80
 Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Ile Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 34

<211> 251

<212> PRT

<213> Homo sapiens

<400> 34

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Arg Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Lys Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 35

<211> 251

<212> PRT

<213> Homo sapiens

<400> 35

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30
 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45
 Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80
 Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Pro Phe Tyr Asp Ile Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110
 Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125
 Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140
 Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Lys Arg
 145 150 155 160
 Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175
 Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190
 Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205
 Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220
 Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
245 250

<210> 36
<211> 251
<212> PRT
<213> Homo sapiens

<400> 36
Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Phe Tyr Asp Ile Leu Thr Arg Tyr Val Phe Gln Tyr Phe
100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Lys Arg
145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 37

<211> 251

<212> PRT

<213> Homo sapiens

<400> 37

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Lys Arg

145 150 155 160
 Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175
 Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190
 Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205
 Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220
 Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240
 Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

 <210> 38
 <211> 251
 <212> PRT
 <213> Homo sapiens

 <400> 38
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

 Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

 Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

 Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

 Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Leu Gly Tyr Tyr
 100 105 110

Leu Ser Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 39
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 39
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
180 185 190

Gly Ala Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
245 250

<210> 40

<211> 251

<212> PRT

<213> Homo sapiens

<400> 40

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30
 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45
 Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80
 Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Val Trp
 100 105 110
 Val Ala Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125
 Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140
 Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160
 Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175
 Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190
 Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205
 Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220
 Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240
 Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 41
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 41

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Ile Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 42
 <211> 251
 <212> PRT'
 <213> Homo sapiens

<400> 42
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val

165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
195 200 205

Lys Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
.210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
245 250

<210> 43
<211> 251
<212> PRT
<213> Homo sapiens

<400> 43

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 44
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 44
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Lys Arg
145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
245 250

<210> 45

<211> 251

<212> PRT

<213> Homo sapiens

<400> 45

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Arg Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 46
 <211> 251
 <212> PRT

<213> Homo sapiens

<400> 46

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Gly Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 47

<211> 251

<212> PRT

<213> Homo sapiens

<400> 47

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Leu Pro Arg Val
 100 105 110

Ile Pro Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr

180 185 190
 Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205
 Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220
 Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240
 Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250
 <210> 48
 <211> 250
 <212> PRT
 <213> Homo sapiens
 <400> 48
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30
 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45
 Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80
 Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Cys Arg Pro His
 100 105 110
 Phe Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly
 115 120 125
 Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr Thr
 130 135 140

Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala
 145 150 155 160

Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val Ala
 165 170 175

Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr Gly
 180 185 190

Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser Glu
 195 200 205

Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp
 210 215 220

Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr Phe
 225 230 235 240

Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 49
 <211> 250
 <212> PRT
 <213> Homo sapiens

<400> 49
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Arg Cys Pro Tyr
 100 105 110

Val Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly
 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr Thr
 130 135 140

Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala
 145 150 155 160

Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val Ala
 165 170 175

Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr Gly
 180 185 190

Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser Glu
 195 200 205

Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp
 210 215 220

Phe Ala Met Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr Phe
 225 230 235 240

Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 50
 <211> 250
 <212> PRT
 <213> Homo sapiens

<400> 50
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Arg Pro Asp
100 105 110

Leu Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly
115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr Thr
130 135 140

Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala
145 150 155 160

Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val Ala
165 170 175

Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr Gly
180 185 190

Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser Glu
195 200 205

Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp
210 215 220

Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr Phe
225 230 235 240

Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
245 250

<210> 51
<211> 250
<212> PRT
<213> Homo sapiens

<400> 51
Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala

1	5	10	15
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His	20	25	30
Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val	35	40	45
Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe	50	55	60
Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr	65	70	75
Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys	85	90	95
Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Lys Ser Met Pro	100	105	110
Thr Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly	115	120	125
Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr Thr	130	135	140
Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala	145	150	155
Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val Ala	165	170	175
Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr Gly	180	185	190
Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser Glu	195	200	205
Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp	210	215	220
Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr Phe	225	230	235
			240

Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
245 250

<210> 52
<211> 250
<212> PRT
<213> Homo sapiens

<400> 52
Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Pro Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
65 70 75 80

Thr Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Pro Phe Leu Tyr
100 105 110

Cys Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly
115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr Thr
130 135 140

Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala
145 150 155 160

Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val Ala
165 170 175

Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr Gly
180 185 190

Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser Glu

195 200 205
 Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp
 210 215 220

 Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr Phe
 225 230 235 240

 Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

 <210> 53
 <211> 250
 <212> PRT
 <213> Homo sapiens

 <400> 53
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

 Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

 Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

 Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

 Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Pro Val Pro Ser
 100 105 110

 Thr Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly
 115 120 125

 Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr Thr
 130 135 140

 Leu Thr Gln Ser Pro Asp Ala Leu Ser Leu Ser Pro Gly Glu Arg Ala
 145 150 155 160

Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val Ala
 165 170 175

Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr Gly
 180 185 190

Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser Glu
 195 200 205

Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp
 210 215 220

Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr Phe
 225 230 235 240

Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 54
 <211> 250
 <212> PRT
 <213> Homo sapiens

<400> 54
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Gly Ile His Gly
 100 105 110

Leu Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly
 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr Thr
 130 135 140

Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala
 145 150 155 160

Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val Ala
 165 170 175

Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr Gly
 180 185 190

Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser Glu
 195 200 205

Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp
 210 215 220

Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr Phe
 225 230 235 240

Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 55
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 55
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Pro Cys Ser Pro
100 105 110

Pro Arg Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
245 250

<210> 56

<211> 250

<212> PRT

<213> Homo sapiens

<400> 56

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His

20	25	30
Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val		
35	40	45
Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe		
50	55	60
Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr		
65	70	75
Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys		
85	90	95
Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Cys Tyr Pro Pro		
100	105	110
Ala Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly		
115	120	125
Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr Thr		
130	135	140
Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala		
145	150	155
Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val Ala		
165	170	175
Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr Gly		
180	185	190
Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser Glu		
195	200	205
Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp		
210	215	220
Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr Phe		
225	230	235
Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg		
245	250	

<210> 57

<211> 250

<212> PRT

<213> Homo sapiens

<400> 57

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Leu Pro Leu Leu
 100 105 110

Ser Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly
 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr Thr
 130 135 140

Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala
 145 150 155 160

Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val Ala
 165 170 175

Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr Gly
 180 185 190

Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser Glu
 195 200 205

Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp

210 215 220
 Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr Phe
 225 230 235 240

 Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

 <210> 58
 <211> 250
 <212> PRT
 <213> Homo sapiens

 <400> 58
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

 Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

 Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

 Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

 Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Ala Leu Tyr Arg
 100 105 110

 Leu Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly
 115 120 125

 Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr Thr
 130 135 140

 Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala
 145 150 155 160

 Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val Ala
 165 170 175

Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr Gly
 180 185 190

Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser Glu
 195 200 205

Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp
 210 215 220

Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr Phe
 225 230 235 240

Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 59
 <211> 250
 <212> PRT
 <213> Homo sapiens

<400> 59
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Arg Ala Ser Phe
 100 105 110

Ser Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly
 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr Thr
 130 135 140

Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala
 145 150 155 160

Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val Ala
 165 170 175

Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr Gly
 180 185 190

Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser Glu
 195 200 205

Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp
 210 215 220

Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr Phe
 225 230 235 240

Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 60

<211> 250

<212> PRT

<213> Homo sapiens

<400> 60

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Cys Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Cys Thr Pro Val
100 105 110

Pro Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly
115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr Thr
130 135 140

Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala
145 150 155 160

Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val Ala
165 170 175

Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr Gly
180 185 190

Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser Glu
195 200 205

Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp
210 215 220

Phe Ala Ala Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr Phe
225 230 235 240

Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
245 250

<210> 61
<211> 251
<212> PRT
<213> Homo sapiens

<400> 61
Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val

35 40 45
 Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80
 Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Trp Pro Ser Phe
 100 105 110
 Phe Ser Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125
 Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140
 Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160
 Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175
 Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190
 Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205
 Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220
 Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240
 Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 62
 <211> 250
 <212> PRT
 <213> Homo sapiens

<400> 62

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Thr Pro Arg Gly
 100 105 110

Tyr Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly
 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr Thr
 130 135 140

Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala
 145 150 155 160

Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val Ala
 165 170 175

Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr Gly
 180 185 190

Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser Glu
 195 200 205

Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp
 210 215 220

Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr Phe

225

230

235

240

Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 63

<211> 250

<212> PRT

<213> Homo sapiens

<400> 63

Gln Val Gln Leu Val Gln Ser Val Val Glu Val Arg Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Ser Ser Leu Leu
 100 105 110

Ser Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly
 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr Thr
 130 135 140

Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala
 145 150 155 160

Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val Ala
 165 170 175

Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr Gly
 180 185 190

Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser Glu
 195 200 205

Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp
 210 215 220

Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr Phe
 225 230 235 240

Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 64
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 64
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Pro Leu Leu Pro
 100 105 110

Leu Cys Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 65
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 65
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Pro Pro Pro Ser
 100 105 110

Phe Leu Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 66
 <211> 250
 <212> PRT
 <213> Homo sapiens

<400> 66
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe

50 55 60
 Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80
 Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Pro Thr Ser Thr
 100 105 110
 Thr Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly
 115 120 125
 Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr Thr
 130 135 140
 Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala
 145 150 155 160
 Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val Thr
 165 170 175
 Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr Gly
 180 185 190
 Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser Glu
 195 200 205
 Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp
 210 215 220
 Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr Phe
 225 230 235 240
 Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 67

<211> 251

<212> PRT

<213> Homo sapiens

<400> 67

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Ile Ser Cys Ser
 100 105 110

Trp Ala Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Leu Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg

245

250

<210> 68

<211> 251

<212> PRT

<213> Homo sapiens

<400> 68

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Ser Ala Leu Pro
 100 105 110

Pro Pro Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 69
 <211> 250
 <212> PRT
 <213> Homo sapiens

<400> 69
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Cys Arg His Leu
 100 105 110

Phe Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly
 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr Thr
 130 135 140

Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala
 145 150 155 160

Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val Ala
 165 170 175

Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr Gly
 180 185 190

Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser Glu
 195 200 205

Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp
 210 215 220

Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr Phe
 225 230 235 240

Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 70
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 70
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asp His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Val Ser Phe Pro
 100 105 110

Ser Leu Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 71
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 71
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Val Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr

65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Met Gly Val Thr
100 105 110

Pro Ser Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
165 170 175

Ala Trp Tyr Gln Arg Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
245 250

<210> 72
<211> 251
<212> PRT
<213> Homo sapiens

<400> 72
Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Leu Phe Arg Pro
 100 105 110

Val Leu Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Ser Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 73

<211> 250

<212> PRT

<213> Homo sapiens

<400> 73

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Pro Ser Val Gly
 100 105 110

Gly Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly
 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr Thr
 130 135 140

Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala
 145 150 155 160

Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val Ala
 165 170 175

Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr Gly
 180 185 190

Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser Glu
 195 200 205

Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp
 210 215 220

Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr Phe
 225 230 235 240

Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 74
 <211> 250
 <212> PRT
 <213> Homo sapiens

<400> 74
 Gln Val Gln Leu Val Gln Pro Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Pro Pro Thr Arg
 100 105 110

His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly
 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr Thr
 130 135 140

Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala
 145 150 155 160

Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val Ala
 165 170 175

Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr Gly
 180 185 190

Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser Glu
 195 200 205

Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp
 210 215 220

Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr Phe
 225 230 235 240

Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 75
 <211> 250
 <212> PRT
 <213> Homo sapiens

<400> 75
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Leu Arg Ser Arg
 100 105 110

Asp Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly
 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr Thr
 130 135 140

Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala
 145 150 155 160

Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val Ala
 165 170 175

Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr Gly
 180 185 190

Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser Glu
 195 200 205

Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp
 210 215 220

Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr Phe
 225 230 235 240

Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 76

<211> 250

<212> PRT

<213> Homo sapiens

<400> 76

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Arg Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys

85 90 95
 Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Pro Leu Leu Pro
 100 105 110
 Pro Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly
 115 120 125
 Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr Thr
 130 135 140
 Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala
 145 150 155 160
 Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val Ala
 165 170 175
 Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr Gly
 180 185 190
 Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser Glu
 195 200 205
 Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp
 210 215 220
 Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr Phe
 225 230 235 240
 Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250
 <210> 77
 <211> 250
 <212> PRT
 <213> Homo sapiens
 <400> 77
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30
 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Leu Arg Cys Val
 100 105 110

Leu Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly
 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr Thr
 130 135 140

Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala
 145 150 155 160

Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val Ala
 165 170 175

Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr Gly
 180 185 190

Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser Glu
 195 200 205

Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp
 210 215 220

Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr Phe
 225 230 235 240

Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 78
 <211> 250
 <212> PRT
 <213> Homo sapiens

<400> 78

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val His Pro Ser Arg
 100 105 110

Ser Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly
 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr Thr
 130 135 140

Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala
 145 150 155 160

Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val Ala
 165 170 175

Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr Gly
 180 185 190

Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser Glu
 195 200 205

Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp
 210 215 220

Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr Phe
 225 230 235 240

Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
245 250

<210> 79

<211> 251

<212> PRT

<213> Homo sapiens

<400> 79

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Leu Arg Leu Pro
100 105 110

Pro Gln Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 80

<211> 250

<212> PRT

<213> Homo sapiens

<400> 80

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Gly Pro Tyr Gly
 100 105 110

Thr Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly
 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr Thr
 130 135 140

Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala
 145 150 155 160

Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val Ala
 165 170 175

Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr Gly
 180 185 190

Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser Lys
 195 200 205

Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp
 210 215 220

Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr Phe
 225 230 235 240

Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 81
 <211> 250
 <212> PRT
 <213> Homo sapiens

<400> 81
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Thr Thr Pro Cys

100 105 110
 Thr Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly
 115 120 125
 Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr Thr
 130 135 140
 Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala
 145 150 155 160
 Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val Ala
 165 170 175
 Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr Gly
 180 185 190
 Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser Glu
 195 200 205
 Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp
 210 215 220
 Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr Phe
 225 230 235 240
 Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250
 <210> 82
 <211> 244
 <212> PRT
 <213> Homo sapiens
 <400> 82
 Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
 20 25 30
 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Asp Trp Val
 35 40 45
 Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

Glu Gly Arg Phe Ala Val Ser Arg Asp Asn Ala Lys Asn Ala Leu Tyr
 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Thr Lys Ala Ser Tyr Leu Ser Thr Ser Ser Ser Leu Asp Asn Trp Gly
 100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly
 115 120 125

Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro
 130 135 140

Ser Ser Leu Ser Ala Ser Ile Gly Asp Arg Val Thr Ile Thr Cys Arg
 145 150 155 160

Ala Ser Gln Gly Ile Arg Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro
 165 170 175

Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Thr Leu Gln Ser
 180 185 190

Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 195 200 205

Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Val Ala Thr Tyr Tyr Cys
 210 215 220

Gln Lys Tyr Asn Ser Ala Pro Tyr Ala Phe Gly Gln Gly Thr Lys Val
 225 230 235 240

Glu Ile Lys Arg

<210> 83

<211> 251

<212> PRT

<213> Homo sapiens

<400> 83

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asp His
20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
195 200 205

Glu Thr Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
245 250

<210> 84

<211> 251

<212> PRT

<213> Homo sapiens

<400> 84

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Gly Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Ile Pro Phe Leu
 100 105 110

Pro Leu Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 85
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 85
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Leu His Ile Tyr
 100 105 110

Pro His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
195 200 205

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
245 250

<210> 86

<211> 251

<212> PRT

<213> Homo sapiens

<400> 86

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Phe Ser Asn His
20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Asn Tyr Val Phe Glu Tyr Tyr
100 105 110

Ala Ser Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly

115 120 125
 Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140
 Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160
 Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175
 Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190
 Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205
 Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220
 Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240
 Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

 <210> 87
 <211> 251
 <212> PRT
 <213> Homo sapiens

 <400> 87
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

 Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

 Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Ile Leu Tyr Tyr
100 105 110

Leu His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
245 250

<210> 88
<211> 251
<212> PRT
<213> Homo sapiens

<400> 88
Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Pro Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 89

<211> 251

<212> PRT

<213> Homo sapiens

<400> 89

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Leu Met Tyr Phe
 100 105 110

Pro His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 90
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 90
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Leu Phe Phe Tyr
 100 105 110

Pro Leu Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 91
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 91
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr

130 135 140
 Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160
 Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175
 Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190
 Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205
 Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220
 Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240
 Phe Gly Gln Gly Thr Arg Leu Val Ile Arg Arg
 245 250
 <210> 92
 <211> 251
 <212> PRT
 <213> Homo sapiens
 <400> 92
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30
 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45
 Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80
 Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Asp Tyr Tyr
 100 105 110

Ala Ser Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 93

<211> 251

<212> PRT

<213> Homo sapiens

<400> 93

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Gly Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Ile Pro Phe Leu
 100 105 110

Pro Leu Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Ser Arg
 245 250

<210> 94
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 94

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Ser Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 95

<211> 251

<212> PRT

<213> Homo sapiens

<400> 95

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Glu Tyr Tyr
 100 105 110

Ser Leu Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 96

<211> 251

<212> PRT

<213> Homo sapiens

<400> 96

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg

145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
245 250

<210> 97
<211> 251
<212> PRT
<213> Homo sapiens

<400> 97
Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Ala Phe Ser Asn His
20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Ala Lys Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 98
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 98
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly Tyr Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Leu Glu Phe Tyr
100 105 110

Leu Leu Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
245 250

<210> 99

<211> 251

<212> PRT

<213> Homo sapiens

<400> 99

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Lys Arg
 145 150 155 160

Ala Thr Leu Pro Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 100

<211> 250

<212> PRT

<213> Homo sapiens

<400> 100

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Leu Pro Leu Asp
 100 105 110

Ser Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly
 115 120 125

Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr Thr
 130 135 140

Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala
 145 150 155 160

Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val Ala
 165 170 175

Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr Gly
 180 185 190

Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser Glu
 195 200 205

Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp
 210 215 220

Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr Phe
 225 230 235 240

Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 101
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 101
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Glu Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Leu Tyr Phe Tyr
 100 105 110

Pro Ser Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val

165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
245 250

<210> 102
<211> 251
<212> PRT
<213> Homo sapiens

<400> 102

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Asn Thr Ala Tyr
65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 103
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 103
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Val Lys Arg
 245 250

<210> 104

<211> 251

<212> PRT

<213> Homo sapiens

<400> 104

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Thr Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 105

<211> 251

<212> PRT

<213> Homo sapiens

<400> 105

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Glu Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Val Lys Arg
 245 250

<210> 106
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 106
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Leu His Tyr Tyr
 100 105 110

Ala Leu Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr

180 185 190
 Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205
 Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220
 Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240
 Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250
 <210> 107
 <211> 250
 <212> PRT
 <213> Homo sapiens
 <400> 107
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30
 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45
 Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80
 Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Leu Pro Pro Ser
 100 105 110
 Val Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly
 115 120 125
 Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr Thr
 130 135 140

Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala
 145 150 155 160

Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val Ala
 165 170 175

Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr Gly
 180 185 190

Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser Glu
 195 200 205

Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp
 210 215 220

Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr Phe
 225 230 235 240

Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 108

<211> 251

<212> PRT

<213> Homo sapiens

<400> 108

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Pro Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 109

<211> 251

<212> PRT

<213> Homo sapiens

<400> 109

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Arg Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 110

<211> 251

<212> PRT

<213> Homo sapiens

<400> 110

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala

1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30
 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45
 Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80
 Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110
 Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125
 Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140
 Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160
 Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175
 Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile Tyr
 180 185 190
 Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205
 Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220
 Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg.
245 250

<210> 111
<211> 248
<212> PRT
<213> Homo sapiens

<400> 111
Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala Ser Val Lys
1 5 10 15

Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His Gly Ile Ser
20 25 30

Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val Gly Trp Ile
35 40 45

Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe Gln Gly Arg
50 55 60

Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr Ile Glu Leu
65 70 75 80

Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys Ala Arg Pro
85 90 95

Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe Asp His Trp
100 105 110

Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly
115 120 125

Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr Thr Leu Thr
130 135 140

Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu
145 150 155 160

Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val Ala Trp Tyr
165 170 175

Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr Gly Thr Ser
180 185 190

Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser Glu Ser Gly

195 200 205
 Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp Phe Ala
 210 215 220
 Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr Phe Gly Gln
 225 230 235 240
 Gly Thr Arg Leu Glu Ile Lys Arg
 245
 <210> 112
 <211> 251
 <212> PRT
 <213> Homo sapiens
 <400> 112
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30
 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45
 Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80
 Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Leu His Tyr Tyr
 100 105 110
 Leu Tyr Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125
 Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140
 Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 113
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 113
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Ile Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 114
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 114
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
100 105 110

Asp His Trp Gly Gln Gly Thr Ile Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asp Thr Ser Pro Arg Thr
225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
245 250

<210> 115
<211> 251
<212> PRT
<213> Homo sapiens

<400> 115
Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His

20	25	30
Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val		
35	40	45
Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe		
50	55	60
Gln Gly Arg Val Thr Met Thr Thr Asp Thr Ser Thr Ser Thr Ala Tyr		
65	70	75
Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys		
85	90	95
Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe		
100	105	110
Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly		
115	120	125
Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr		
130	135	140
Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg		
145	150	155
Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val		
165	170	175
Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr		
180	185	190
Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser		
195	200	205
Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu		
210	215	220
Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr		
225	230	235
Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg		
245	250	

<210> 116

<211> 251

<212> PRT

<213> Homo sapiens

<400> 116

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Ala Ile Ser Arg Leu Glu Pro Glu

210 215 220
 Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

 Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

 <210> 117
 <211> 251
 <212> PRT
 <213> Homo sapiens

 <400> 117
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

 Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

 Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

 Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

 Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

 Asp His Trp Asp Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

 Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

 Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

 Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Arg Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Ala Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Cys Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 118

<211> 251

<212> PRT

<213> Homo sapiens

<400> 118

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Ser Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 119
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 119
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Asn Arg
245 250

<210> 120
<211> 251
<212> PRT
<213> Homo sapiens

<400> 120
Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val

35 40 45
 Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80
 Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110
 Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125
 Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140
 Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160
 Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175
 Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190
 Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205
 Glu Ser Gly Thr Val Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220
 Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240
 Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 121
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 121

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe His Tyr Tyr
 100 105 110

Pro Leu Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr

225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
245 250

<210> 122
<211> 251
<212> PRT
<213> Homo sapiens

<400> 122
Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
1 5 10 15
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
20 25 30
Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
35 40 45
Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
50 55 60
Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
65 70 75 80
Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95
Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Pro Val Tyr
100 105 110
Tyr Leu Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
115 120 125
Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
130 135 140
Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
145 150 155 160
Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
165 170 175
Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 123

<211> 251

<212> PRT

<213> Homo sapiens

<400> 123

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Gly Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Leu His Phe Ile
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 124

<211> 251

<212> PRT

<213> Homo sapiens

<400> 124

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Pro Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 125

<211> 251

<212> PRT

<213> Homo sapiens

<400> 125

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Pro Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe

50 55 60
 Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80
 Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110
 Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125
 Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140
 Thr Leu Thr Gln Cys Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160
 Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175
 Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190
 Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205
 Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220
 Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240
 Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250
 <210> 126
 <211> 251
 <212> PRT
 <213> Homo sapiens
 <400> 126
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala His Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Asp Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg

245

250

<210> 127

<211> 251

<212> PRT

<213> Homo sapiens

<400> 127

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe His Tyr Tyr
 100 105 110

Asp Val Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 128

<211> 251

<212> PRT

<213> Homo sapiens

<400> 128

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Gly Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 129

<211> 251

<212> PRT

<213> Homo sapiens

<400> 129

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val His Glu Phe Phe
 100 105 110

Ser Leu Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 130
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 130
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Ser Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr

65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
245 250

<210> 131
<211> 251
<212> PRT
<213> Homo sapiens

<400> 131

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Lys Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Gly Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 132

<211> 251

<212> PRT

<213> Homo sapiens

<400> 132

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly Arg Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 133
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 133
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Arg Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Ala Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 134

<211> 251

<212> PRT

<213> Homo sapiens

<400> 134

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Thr
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Gly Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Lys Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 135

<211> 251

<212> PRT

<213> Homo sapiens

<400> 135

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Pro Asp Asp Thr Ala Val Tyr Tyr Cys

				85					90										95
Ala	Arg	Pro	Phe	Tyr	Asp	Thr	Leu	Thr	Ser	Tyr	Val	Phe	Gln	Tyr	Phe				
			100					105					110						
Asp	His	Trp	Gly	Gln	Gly	Thr	Met	Val	Thr	Val	Ser	Ser	Gly	Gly	Gly				
		115					120					125							
Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Ala	Leu	Glu	Thr				
	130					135					140								
Thr	Leu	Thr	Gln	Ser	Pro	Asp	Thr	Leu	Ser	Leu	Ser	Pro	Gly	Glu	Arg				
145					150					155					160				
Ala	Thr	Leu	Ser	Cys	Arg	Ala	Ser	Gln	Ser	Val	Thr	Arg	Gly	Trp	Val				
				165					170					175					
Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Ala	Pro	Arg	Leu	Leu	Met	Tyr				
			180					185					190						
Gly	Thr	Ser	Arg	Arg	Ala	Thr	Gly	Val	Pro	Asp	Arg	Phe	Ser	Gly	Ser				
	195						200					205							
Glu	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Arg	Leu	Glu	Pro	Glu				
	210					215					220								
Asp	Phe	Ala	Val	Tyr	Tyr	Cys	Gln	Gln	Tyr	Ala	Thr	Ser	Pro	Arg	Thr				
225					230					235					240				
Phe	Gly	Gln	Gly	Thr	Arg	Leu	Glu	Ile	Lys	Arg									
				245					250										
<210> 136																			
<211> 251																			
<212> PRT																			
<213> Homo sapiens																			
<400> 136																			
Gln	Val	Gln	Leu	Val	Gln	Ser	Gly	Val	Glu	Val	Lys	Lys	Pro	Gly	Ala				
1				5					10					15					
Ser	Val	Lys	Val	Ser	Cys	Lys	Ala	Ser	Gly	Tyr	Thr	Phe	Ser	Asp	His				
			20					25					30						
Gly	Ile	Ser	Trp	Val	Arg	Gln	Ala	Pro	Gly	Gln	Gly	Leu	Glu	Trp	Val				
	35					40						45							

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 137

<211> 251

<212> PRT

<213> Homo sapiens

<400> 137

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Ala Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 138

<211> 251

<212> .PRT

<213> Homo sapiens

<400> 138

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Ala Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asn Arg Phe Ser Asp Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Tyr Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 139

<211> 251

<212> PRT

<213> Homo sapiens

<400> 139

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Arg Arg
 245 250

<210> 140

<211> 250

<212> PRT

<213> Homo sapiens

<400> 140

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Arg Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Leu Ala Leu Asp

100 105 110
 Leu Trp Gly Gln Gly Thr Met Val Asn Val Ser Ser Gly Gly Gly Gly
 115 120 125
 Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr Thr
 130 135 140
 Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg Ala
 145 150 155 160
 Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val Ala
 165 170 175
 Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr Gly
 180 185 190
 Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser Glu
 195 200 205
 Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu Asp
 210 215 220
 Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr Phe
 225 230 235 240
 Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250
 <210> 141
 <211> 251
 <212> PRT
 <213> Homo sapiens
 <400> 141
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30
 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45
 Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gly Tyr Tyr
 100 105 110

Ser Leu Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Ile Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 142

<211> 251

<212> PRT

<213> Homo sapiens

<400> 142

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Gly Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 143

<211> 251

<212> PRT

<213> Homo sapiens

<400> 143

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Leu Lys Tyr Tyr
 100 105 110

Thr Asp Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 144
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 144
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Ala Arg Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 145

<211> 251

<212> PRT

<213> Homo sapiens

<400> 145

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Met His Ala Tyr
 100 105 110

Pro Leu Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly

115 120 125
 Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

 Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

 Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

 Ala Trp Tyr Gln Gln Lys Ser Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

 Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

 Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

 Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Gln Thr
 225 230 235 240

 Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

 <210> 146
 <211> 251
 <212> PRT
 <213> Homo sapiens

 <400> 146
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

 Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

 Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe His Tyr Leu
 100 105 110

Pro Val Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 147

<211> 251

<212> PRT

<213> Homo sapiens

<400> 147

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Pro Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 148

<211> 251

<212> PRT

<213> Homo sapiens

<400> 148

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Cys Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Glu Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Thr Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Asp Gln Ala Pro Arg Leu Leu Ile Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Asp Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 149

<211> 251

<212> PRT

<213> Homo sapiens

<400> 149

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Ala Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 150

<211> 251

<212> PRT

<213> Homo sapiens

<400> 150

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Glu Tyr Phe
 100 105 110

Ser Val Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr

130 135 140
 Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160
 Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175
 Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190
 Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205
 Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220
 Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240
 Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

 <210> 151
 <211> 251
 <212> PRT
 <213> Homo sapiens

 <400> 151
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

 Gly Ile Ser Cys Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

 Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

 Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

 Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 152

<211> 251

<212> PRT

<213> Homo sapiens

<400> 152

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Leu Phe Tyr Tyr
 100 105 110

Pro Leu Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 153

<211> 251

<212> PRT

<213> Homo sapiens

<400> 153

Gln Val Gln Leu Val Gln Pro Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
245 250

<210> 154

<211> 251

<212> PRT

<213> Homo sapiens

<400> 154

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
35 40 45

Gly Trp Ile Ser Gly Arg Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
165 170 175

Ala Trp Tyr Gln Gln Lys Pro Ala Gln Ala Pro Arg Leu Leu Met Tyr
180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asn Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 155

<211> 251

<212> PRT

<213> Homo sapiens

<400> 155

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys His Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg

145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
245 250

<210> 156

<211> 251

<212> PRT

<213> Homo sapiens

<400> 156

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
100 105 110

Asp His Trp Val Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Asp Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Arg Arg
 245 250

<210> 157
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 157
 Gln Ile Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Asp Ser
195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
245 250

<210> 158

<211> 251

<212> PRT

<213> Homo sapiens

<400> 158

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Arg Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 159

<211> 251

<212> PRT

<213> Homo sapiens

<400> 159

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Phe Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 160
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 160
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Leu Ala Tyr Tyr
 100 105 110

Pro Asp Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val

165 170 175
 Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190
 Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205
 Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220
 Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240
 Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250
 <210> 161
 <211> 251
 <212> PRT
 <213> Homo sapiens
 <400> 161
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30
 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45
 Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Thr Ile Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80
 Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110
 Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 162
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 162
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Asp Ser
195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
245 250

<210> 163

<211> 251

<212> PRT

<213> Homo sapiens

<400> 163

Gln Val Gln Leu Val Gln Ser Gly Val Glu Glu Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Gly Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 164

<211> 244

<212> PRT

<213> Homo sapiens

<400> 164

Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg
 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Asp Tyr
 20 25 30

Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Asp Trp Val
 35 40 45

Ser Ala Ile Thr Trp Asn Ser Gly His Ile Asp Tyr Ala Asp Ser Val
 50 55 60

Glu Gly Arg Phe Ala Val Ser Arg Asp Asn Ala Lys Asn Ala Leu Tyr
 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Pro Glu Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Thr Lys Ala Ser Tyr Leu Ser Thr Ser Ser Ser Leu Asp Asn Trp Gly
 100 105 110

Gln Gly Thr Leu Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly
 115 120 125

Gly Gly Ser Gly Gly Gly Gly Ser Asp Ile Gln Met Thr Gln Ser Pro
 130 135 140

Ser Ser Leu Ser Ala Ser Ile Gly Asp Arg Val Thr Ile Thr Cys Arg
 145 150 155 160

Ala Ser Gln Gly Ile Arg Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro
 165 170 175

Gly Lys Ala Pro Lys Leu Leu Ile Tyr Ala Ala Ser Thr Leu Gln Ser
 180 185 190

Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
 195 200 205

Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Val Ala Thr Tyr Tyr Cys
 210 215 220

Gln Lys Tyr Asn Ser Ala Pro Tyr Ala Phe Gly Gln Gly Thr Lys Val
 225 230 235 240

Glu Ile Glu Arg

<210> 165

<211> 251

<212> PRT

<213> Homo sapiens

<400> 165

Gln Val Gln Leu Val Gln Ser Gly Val Lys Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Leu Pro Val Tyr
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr

180	185	190
Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser		
195	200	205
Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu		
210	215	220
Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr		
225	230	235
Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg		
245	250	
<210> 166		
<211> 251		
<212> PRT		
<213> Homo sapiens		
<400> 166		
Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala		
1	5	10 15
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His		
20	25	30
Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val		
35	40	45
Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe		
50	55	60
Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr		
65	70	75 80
Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys		
85	90	95
Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe		
100	105	110
Ala His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly		
115	120	125
Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr		
130	135	140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 167

<211> 251

<212> PRT

<213> Homo sapiens

<400> 167

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Gly Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 168

<211> 251

<212> PRT

<213> Homo sapiens

<400> 168

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asn Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 169

<211> 251

<212> PRT

<213> Homo sapiens

<400> 169

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala

1	5	10	15
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His	20	25	30
Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val	35	40	45
Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe	50	55	60
Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr	65	70	75
Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys	85	90	95
Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe	100	105	110
Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly	115	120	125
Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr	130	135	140
Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg	145	150	155
Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val	165	170	175
Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr	180	185	190
Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser	195	200	205
Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu	210	215	220
Asp Leu Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr	225	230	235
			240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
245 250

<210> 170
<211> 251
<212> PRT
<213> Homo sapiens

<400> 170
Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Ile Phe Tyr Tyr
100 105 110

Pro Thr Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser

195 200 205
 Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220
 Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240
 Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250
 <210> 171
 <211> 251
 <212> PRT
 <213> Homo sapiens
 <400> 171
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30
 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45
 Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80
 Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110
 Asp His Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly
 115 120 125
 Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140
 Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 172
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 172
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Leu Glu Val Tyr
 100 105 110

His Pro Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 173

<211> 251

<212> PRT

<213> Homo sapiens

<400> 173

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Ala Pro Leu
100 105 110

Val Thr Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
245 250

<210> 174

<211> 251

<212> PRT

<213> Homo sapiens

<400> 174

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His

20 25 30
 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45
 Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80
 Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Leu His Ala Tyr
 100 105 110
 Ala Phe Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125
 Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140
 Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160
 Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175
 Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190
 Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205
 Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220
 Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240
 Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 175

<211> 251

<212> PRT

<213> Homo sapiens

<400> 175

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Gly Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala His Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Ala Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu

210 215 220
 Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

 Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

 <210> 176
 <211> 251
 <212> PRT
 <213> Homo sapiens

 <400> 176
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

 Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

 Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

 Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

 Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Ile Leu Tyr Tyr
 100 105 110

 Leu His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

 Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

 Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

 Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Gln Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 177

<211> 251

<212> PRT

<213> Homo sapiens

<400> 177

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Glu Phe Leu
 100 105 110

Pro Leu Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 178

<211> 251

<212> PRT

<213> Homo sapiens

<400> 178

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Arg Pro Phe Tyr
100 105 110

Ala His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
195 200 205

Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
245 250

<210> 179

<211> 251

<212> PRT

<213> Homo sapiens

<400> 179

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val

35	40	45	
Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe			
50	55	60	
Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr			
65	70	75	80
Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys			
85	90	95	
Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe			
100	105	110	
Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly			
115	120	125	
Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr			
130	135	140	
Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg			
145	150	155	160
Ala Thr Leu Ser Cys Arg Ala Ser Gln Gly Val Thr Arg Gly Trp Val			
165	170	175	
Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr			
180	185	190	
Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser			
195	200	205	
Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu			
210	215	220	
Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr			
225	230	235	240
Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg			
245	250		

<210> 180

<211> 251

<212> PRT

<213> Homo sapiens

<400> 180

Gln Ala Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Leu His Phe Tyr
 100 105 110

Arg Val Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr

225

230

235

240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 181

<211> 251

<212> PRT

<213> Homo sapiens

<400> 181

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Val Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 182

<211> 251

<212> PRT

<213> Homo sapiens

<400> 182

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Ile Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 183

<211> 251

<212> PRT

<213> Homo sapiens

<400> 183

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Gly Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val His Glu Phe Phe
 100 105 110

Ser Leu Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 184

<211> 251

<212> PRT

<213> Homo sapiens

<400> 184

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Arg Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe

50 55 60
 Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80
 Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Met Gln Phe Phe
 100 105 110
 Pro Thr Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125
 Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140
 Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160
 Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175
 Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190
 Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205
 Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220
 Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240
 Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

 <210> 185
 <211> 251
 <212> PRT
 <213> Homo sapiens

 <400> 185
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Leu Ser Phe Tyr
 100 105 110

Pro Val Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg

245

250

<210> 186

<211> 251

<212> PRT

<213> Homo sapiens

<400> 186

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Leu Tyr Tyr Tyr
 100 105 110

Ala Phe Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Leu Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Ala Gly Val Pro Asp Arg Phe Ser Asp Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Cys Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 187

<211> 251

<212> PRT

<213> Homo sapiens

<400> 187

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ser His Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Phe Arg Arg Pro Ser Gly Val Pro Asp Arg Phe Ser Asp Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Ser Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Ser Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 188

<211> 251

<212> PRT

<213> Homo sapiens

<400> 188

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Asp Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 189
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 189
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr

65 70 75 80

Ile Glu Leu Lys Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
245 250

<210> 190
<211> 251
<212> PRT
<213> Homo sapiens

<400> 190

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Leu His Phe Tyr
 100 105 110

Pro Leu Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 191

<211> 251

<212> PRT

<213> Homo sapiens

<400> 191

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Leu Gln Tyr Tyr
 100 105 110

Val Leu Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 192
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 192
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Leu Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Ala
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 193

<211> 251

<212> PRT

<213> Homo sapiens

<400> 193

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Val Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 194

<211> 251

<212> PRT

<213> Homo sapiens

<400> 194

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Val Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys

85 90 95
 Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110
 Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125
 Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140
 Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160
 Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175
 Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190
 Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205
 Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220
 Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240
 Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250
 <210> 195
 <211> 251
 <212> PRT
 <213> Homo sapiens
 <400> 195
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30
 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp Tyr Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 196

<211> 251

<212> PRT

<213> Homo sapiens

<400> 196

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Leu Pro Val Trp
 100 105 110

Val Ser Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Asp Gln Ala Ser Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Ser Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 197

<211> 251

<212> PRT

<213> Homo sapiens

<400> 197

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Thr Thr Gly Val Pro Gly Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 198

<211> 251

<212> PRT

<213> Homo sapiens

<400> 198

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Gly Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Pro Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 199

<211> 251

<212> PRT

<213> Homo sapiens

<400> 199

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Tyr Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe

100 105 110
 Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125
 Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140
 Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160
 Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175
 Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190
 Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205
 Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220
 Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240
 Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250
 <210> 200
 <211> 251
 <212> PRT
 <213> Homo sapiens
 <400> 200
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30
 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45
 Gly Trp Val Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
245 250

<210> 201

<211> 251

<212> PRT

<213> Homo sapiens

<400> 201

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30
 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45
 Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80
 Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Ile Glu Tyr Tyr
 100 105 110
 Pro Val Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125
 Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140
 Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160
 Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175
 Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190
 Gly Thr Ser Arg Arg Thr Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205
 Glu Ser Gly Thr Asp Phe Thr Leu Ser Ile Ser Arg Leu Glu Pro Glu
 210 215 220
 Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Val Thr Ser Pro Arg Thr
 225 230 235 240
 Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 202

<211> 251

<212> PRT

<213> Homo sapiens

<400> 202

Gln Val Gln Leu Val Gln Ser Gly Val Glu Ala Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Pro Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 203

<211> 251

<212> PRT

<213> Homo sapiens

<400> 203

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Glu Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Leu His Tyr Leu
 100 105 110

Pro Leu Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Ala Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 204

<211> 251

<212> PRT

<213> Homo sapiens

<400> 204

Gln Val Gln Leu Val Gln Ser Gly Val Gly Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly

115 120 125
 Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140
 Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160
 Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175
 Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190
 Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205
 Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220
 Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240
 Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250
 <210> 205
 <211> 251
 <212> PRT
 <213> Homo sapiens
 <400> 205
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30
 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45
 Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Gly
145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
245 250

<210> 206

<211> 251

<212> PRT

<213> Homo sapiens

<400> 206

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Pro Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe His Phe Tyr
 100 105 110

Pro Val Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 207

<211> 251

<212> PRT

<213> Homo sapiens

<400> 207

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Ala Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 208
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 208
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Leu Glu Ala Phe
 100 105 110

Ser Leu Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Val Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 209

<211> 251

<212> PRT

<213> Homo sapiens

<400> 209

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gly Phe Tyr
 100 105 110

Pro Phe Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr

130 135 140
 Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160
 Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175
 Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190
 Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205
 Glu Ser Gly Thr Gly Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220
 Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240
 Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

 <210> 210
 <211> 251
 <212> PRT
 <213> Homo sapiens

 <400> 210
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30
 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45
 Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80
 Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Ile Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Ser Arg Leu Leu Met Tyr
 180 185 190

Gly Ser Ser Arg Arg Ala Ala Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Ser Ala Val Tyr Cys Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 211

<211> 251

<212> PRT

<213> Homo sapiens

<400> 211

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Ile Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Pro Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 212

<211> 251

<212> PRT

<213> Homo sapiens

<400> 212

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Leu Trp Tyr Tyr
 100 105 110

Gln Asp Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 213

<211> 251

<212> PRT

<213> Homo sapiens

<400> 213

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Ile Pro Phe Tyr
 100 105 110

Pro Leu Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 214
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 214
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg

Ala Ala Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
245 250

<210> 215
<211> 251
<212> PRT
<213> Homo sapiens

<400> 215
Gln Val Gln Leu Val Gln Ser Glu Val Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 216

<211> 251

<212> PRT

<213> Homo sapiens

<400> 216

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Ser Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
245 250

<210> 217

<211> 251

<212> PRT

<213> Homo sapiens

<400> 217

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Leu Glu Tyr Phe
 100 105 110

Pro Leu Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 218

<211> 251

<212> PRT

<213> Homo sapiens

<400> 218

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Leu Glu Phe Phe
 100 105 110

Pro Ala Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 219

<211> 251

<212> PRT

<213> Homo sapiens

<400> 219

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Ile Glu Tyr Leu
 100 105 110

Pro Leu Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val

[illegible]

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 221

<211> 251

<212> PRT

<213> Homo sapiens

<400> 221

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Arg Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Leu Phe Tyr Tyr
 100 105 110

Thr Ala Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 222

<211> 251

<212> PRT

<213> Homo sapiens

<400> 222

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Leu His Tyr Leu
100 105 110

Pro Val Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
115 . 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
245 250

```
<210> 223
<211> 251
<212> PRT
```

<213> Homo sapiens

<400> 223

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Ala Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 224

<211> 251

<212> PRT

<213> Homo sapiens

<400> 224

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn Tyr
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr

180 185 190
 Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205
 Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220
 Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240
 Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250
 <210> 225
 <211> 251
 <212> PRT
 <213> Homo sapiens
 <400> 225
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15
 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30
 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45
 Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80
 Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Met His Tyr Tyr
 100 105 110
 Pro Thr Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125
 Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
245 250

<210> 226

<211> 251

<212> PRT

<213> Homo sapiens

<400> 226

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Leu Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
245 250

<210> 227

<211> 251

<212> PRT

<213> Homo sapiens

<400> 227

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Leu Gln Tyr Phe
 100 105 110

Arg Tyr Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 228

<211> 251

<212> PRT

<213> Homo sapiens

<400> 228

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala

1	5	10	15
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His	20	25	30
Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val	35	40	45
Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe	50	55	60
Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr	65	70	75
Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys	85	90	95
Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Leu Gln Val Phe	100	105	110
Asp Thr Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly	115	120	125
Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr	130	135	140
Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg	145	150	155
Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val	165	170	175
Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr	180	185	190
Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser	195	200	205
Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu	210	215	220
Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr	225	230	235
			240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
245 250

<210> 229

<211> 251

<212> PRT

<213> Homo sapiens

<400> 229

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
145 150 155 160

Ala Thr Leu Ser Cys Arg Val Ser Gln Ser Val Thr Arg Gly Trp Val
165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser

195 200 205
 Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

 Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

 Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

 <210> 230
 <211> 251
 <212> PRT
 <213> Homo sapiens

 <400> 230
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

 Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

 Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

 Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

 Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

 Asp His Trp Gly Gln Gly Ala Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

 Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

 Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 231

<211> 251

<212> PRT

<213> Homo sapiens

<400> 231

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Leu Asp Tyr Tyr
 100 105 110

Ser Ser Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 232

<211> 251

<212> PRT

<213> Homo sapiens

<400> 232

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Phe Tyr Asp Ala Leu Thr Ser Tyr Val Phe Gln Tyr Phe
100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
245 250

<210> 233

<211> 251

<212> PRT

<213> Homo sapiens

<400> 233

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His

20	25	30
Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val		
35	40	45
Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe		
50	55	60
Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr		
65	70	75 80
Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys		
85	90	95
Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe		
100	105	110
Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly		
115	120	125
Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr		
130	135	140
Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg		
145	150	155 160
Ala Thr Leu Ser Cys Arg Ala Ser Arg Ser Val Thr Arg Gly Trp Val		
165	170	175
Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr		
180	185	190
Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser		
195	200	205
Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu		
210	215	220
Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr		
225	230	235 240
Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg		
245	250	

<210> 234

<211> 251

<212> PRT

<213> Homo sapiens

<400> 234

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala

1

5

10

15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His

20

25

30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val

35

40

45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe

50

55

60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr

65

70

75

80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys

85

90

95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Pro Phe Tyr

100

105

110

Pro His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly

115

120

125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr

130

135

140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg

145

150

155

160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val

165

170

175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr

180

185

190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser

195

200

205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu

210 215 220
 Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

 Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

 <210> 235
 <211> 251
 <212> PRT
 <213> Homo sapiens

 <400> 235
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

 Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

 Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

 Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

 Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

 Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

 Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Ile Gly Phe Tyr
 100 105 110

 Pro Val Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

 Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

 Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

 Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 236

<211> 251

<212> PRT

<213> Homo sapiens

<400> 236

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Ser His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 237

<211> 251

<212> PRT

<213> Homo sapiens

<400> 237

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Met Asp Phe Tyr
 100 105 110

Ser Val Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 238

<211> 251

<212> PRT

<213> Homo sapiens

<400> 238

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val

35 40 45
 Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60
 Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80
 Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95
 Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110
 Asp His Trp Gly Gln Gly Thr Met Val Ile Val Ser Ser Gly Gly Gly
 115 120 125
 Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140
 Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160
 Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175
 Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190
 Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205
 Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220
 Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240
 Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 239
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 239

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr

225

230

235

240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 240

<211> 251

<212> PRT

<213> Homo sapiens

<400> 240

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Leu Pro Phe Tyr
 100 105 110

Ala Leu Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Pro Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 241

<211> 251

<212> PRT

<213> Homo sapiens

<400> 241

Gln Val Gln Leu Val Gln Ala Ala Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 242

<211> 251

<212> PRT

<213> Homo sapiens

<400> 242

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Ala Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 243

<211> 251

<212> PRT

<213> Homo sapiens

<400> 243

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe

50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Gly Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
130 135 140

Thr Leu Thr Gln Ser Ser Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
245 250

<210> 244
<211> 251
<212> PRT
<213> Homo sapiens

<400> 244

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Leu Pro Tyr Leu
 100 105 110

Thr His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg

245

250

<210> 245

<211> 251

<212> PRT

<213> Homo sapiens

<400> 245

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Asn Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 246
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 246
 Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Asn Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Val Lys Arg
 245 250

<210> 247

<211> 251

<212> PRT

<213> Homo sapiens

<400> 247

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Glu Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 248

<211> 251

<212> PRT

<213> Homo sapiens

<400> 248

Gln Val Gln Leu Val Gln Ser Val Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr

65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Gly Trp Val
165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
245 250

<210> 249
<211> 251
<212> PRT
<213> Homo sapiens

<400> 249

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Asn Gln Ser Val Thr Arg Gly Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220

Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ala Thr Ser Pro Arg Thr
 225 230 235 240

Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg
 245 250

<210> 250

<211> 251

<212> PRT

<213> Homo sapiens

<400> 250

Gln Val Gln Leu Val Gln Ser Gly Val Glu Val Lys Lys Pro Gly Ala
 1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Ser Asn His
 20 25 30

Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Val
 35 40 45

Gly Trp Ile Ser Gly His Asp Asp Ser Thr Lys Tyr Ala Gln Lys Phe
 50 55 60

Gln Gly Arg Val Thr Met Thr Ala Asp Thr Ser Thr Ser Thr Ala Tyr
 65 70 75 80

Ile Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr Ala Val Tyr Tyr Cys
 85 90 95

Ala Arg Pro Phe Tyr Asp Thr Leu Thr Ser Tyr Val Phe Gln Tyr Phe
 100 105 110

Asp His Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Gly Gly Gly
 115 120 125

Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Ala Leu Glu Thr
 130 135 140

Thr Leu Thr Gln Ser Pro Asp Thr Leu Ser Leu Ser Pro Gly Glu Arg
 145 150 155 160

Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Thr Arg Ala Trp Val
 165 170 175

Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Met Tyr
 180 185 190

Gly Thr Ser Arg Arg Ala Thr Gly Val Pro Asp Arg Phe Ser Gly Ser
 195 200 205

Glu Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu Pro Glu
 210 215 220